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SOME CRITICAL ISSUES OF HIGHER EDUCATION IN INDIA

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DEDICATED
TO
MY WIFE ASHA
AND
CHILDREN CHITRA AND SANJIV

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FOREWORD

In the last twenty-three years, Indian education, be it in the sector of school education or in that of higher education, has achieved considerable growth and steady development. However, the unprecedented expansion achieved in school education and in higher education has brought in its trail stress and strain of many challenges and difficult problems. It is gratifying to note that these challenges and problems are not lightly and glibly passed over by India's educationists and Government. In the current decade, considerable critical literature in the form of field studies and penetrative thinking on current problems of Indian education prepared by teachers, administrators, planners and government has been published. The Report of the Kothari Commission in the recent years is a monumental effort in that direction.

These are desirable developments as India's educational problems are to be solved by her own teachers, educationists, researchers and administrators. It is they who should primarily bring to bear upon them their searching mind and their objective experience to discover their solutions. In this context, I welcome Professor D. M. De'sai's present book on *"Some Critical Issues of Higher Education in India"*. It is a matter of gratification for me that this critical study of the current problems of university education in the country has come from a teacher of a university of which I am the Vice-Chancellor. It is good that university teachers think and write constructively and present their viewpoints on the problems of universities and suggest rational dimensions and directions of reform and change. It is by such academic exercises that a real understanding and insight in the solution of the live issues of universities would emerge.

The volume is divided into nine areas: it has three appendices. It is significant to note that the author does not describe these break-ups of his book as 'chapters' or 'parts' but areas. This is appropriate because he wants to place a focus on issues and problems. The issues both small and big that the author discusses here are over a hundred in number. They have a wide range and variety. They include some general and burning issues of the day, such as, limiting numbers in universities, unemployment among university graduates, the changing role and functions of the modern Indian university, curricular reform, teacher and teaching process, examination reform, adult education, reform in university consti

PREFACE

This volume on "*Some Critical Issues of Higher Education in India*" is built out of the articles, papers, notes, press-columns, speeches and class lectures I happened to prepare in the last thirty months or so. They were lying heaped up in my files and would have remained so for long but for the timely suggestion of a colleague that I should weave out a book from them and share my views and experiences with teachers, students and administrators who have similar interests and commitments.

Higher education in India is passing through a tremendous pressure of expansion and development, it is threatened with a real danger of falling standards, its functions, planning curricula, teaching, examination and administration need so badly a critical review and an objective reappraisal, and the present awakening and aspirations of the teacher and student community as regards their rights to participate in the decision-making process of their universities and colleges have reached such a pitch that loud thinking on all of these aspects by those who are involved in and are associated with higher education should be deemed vital. I have compiled this volume in this context and with this perspective. My object is to share my views and opinions—my convictions and misgivings, my findings and suggestions—with the fellow workers in this field so that there is greater airing of views and greater dialogue on the pressing and crucial issues and problems of colleges and universities.

The issues discussed are general as well as specific. The general issues are the explosion of numbers in universities and the need to put a ceiling on university admissions, functions of a modern Indian university in the context of the fast changing India, man-power planning, unemployment among university graduates, in-service education and professional growth of university teachers and medium of instruction and evaluation. The specific issues are numerous, over a hundred perhaps. They pertain to teachers, students, curriculum, teaching, student learning, examinations, research, university governance and student-welfare and personnel services.

The content of the volume is organised around three principal clusters of issues. They are called 'areas' because in most of the cases the issues discussed are practical and of current purport and

significance for those who are working in colleges and universities or who are associated with them in one capacity or the other. As some of the issues were discussed in press-columns, they tend to be terse and brief and even at times cutting. They all reflect the two central concerns, viz. how the present day Indian university can really be transformed into a vital organ of national development and how its standards of learning and research can be strengthened.

In the Area 1, an attempt is made to present the emergent picture of a modern Indian university. It touches such aspects as the weight of the inherited past traditions, its relationship with Government, the autonomy of teachers, the pressure of numbers, the process and quality of teaching-learning in colleges, examinations, student and teacher participation in university affairs, and the eloquent and the energetic role of the University Grants Commission in building up the present-day Indian university.

The Area 2 deals with the perplexing problem of terrific expansion in university enrolment in the last twenty-three years and the urgency of the need for limiting numbers in universities in the context of their limited resources, meagre employment opportunities in the country and the steady deterioration of university standards of teaching, learning and research.

In the Area 3, some vital functions and responsibilities of the present-day Indian university are set forth. The crucial need and the nature of the extension work to the community by a university are examined in some detail. The question of associating universities with man-power planning is also dealt with. The current burning question of unemployment among graduates, the pressure of numbers, the cry and agitation of students that they want jobs, not degrees, are also reviewed and reflected upon.

The Area 4 consists of eight papers. They centre round college and university teachers and critically deal with issues such as the recruitment of better teachers, improvement of the image and focus of the university teachers in the society and in the professional world, the re-thinking and current outlook needed on the work-load of teachers, the factors and forces affecting staff morale in our colleges and university departments, the out-dated practice currently in vogue of writing confidential reports of teachers in colleges and university departments by their heads and the crucial need for professional orientation of junior teachers. The discussion in this Area is focused mainly on the emergent practical issues

and problems in perspective of a wider reference frame of the improvement of university standards

The Area 5 is made up of twelve papers. All of them are focused on university courses, methods and practices in class-teaching and on the vital aspects of post-graduate research. They deal with issues which often come up for hot discussion in the University Board of Studies, in the meetings of Faculties and Academic Councils, and in the Senate and Syndicate discussions. These are the issues in which the classroom teacher of the college does not usually show, but in fact he should, concern as they affect him the most. Maintenance and evolution of better university standards in the Indian university are dependent upon these factors.

The perennial problem of the medium of instruction is discussed in the Area 6, but the angle of approach and the points of emphasis are somewhat different from the on-going discussions on the question. The problem is examined here on the basis of some findings of the psychology of learning, and a new angle of the three-language formula based on common-sense is brought to bear upon it.

Examinations as they operate in our colleges and universities are being described as the worst feature of higher education in India. The problem is very complex and intriguing. In the Area 7, the ten papers constituting it are devoted to the conceptual framework of the new approach of educational evaluation in examination reform, the phases of university examination reform in the country, the improvement of the techniques and tools of examinations, the controversy centering round the essay question vs objective types of questions, the much debated issue of the place of continuous and comprehensive internal assessment of day-to-day learning and of the achievement of students in university examination, the related crucial issues of private tuitions and of non-attending students, and the administrative aspects of reforming university examination. They reflect some of the current educational thinking on the question.

The Area 8 has twelve papers relating to the needs and problems of university students. Besides reviewing the present-day provision and programmes of student welfare services in colleges and universities, this sector discusses some of the live and pressing issues of the day such as the need for the appointment of Deans of Students in universities, organisation of orientation programmes

for students and setting up counselling and guidance services for students on university campuses. It has also two papers which examine causes of student turbulence on university campuses. One paper is also presented here which discusses the intriguing question of student participation in the decision-making process of the university. Issues such as students' perceptions of curricular and examination reforms, indifferent student attendance in college classes and the re-appraisal of the place and procedures of university convocations are also brought into a search-light in this Area.

The last Area is devoted to the administrative and financial sides of universities in the country. It examines the relationship of universities with the State Government, the role of Government and private agencies in the administration of higher education, the financial issues of universities, the critical problems of university autonomy and the functioning of university governing bodies, viz. the Senate and Syndicate. There is a paper discussing the changes needed in the appointment procedures of the Vice-Chancellor and in the formulation of his role. Questions such as the relative representation of teacher and non-teacher elements on the Senates and Syndicates and student representation on these bodies are also dealt with. One paper examines the question of the desirability of establishing single-faculty technical universities in the country.

The volume contains three Appendices. Some vital statistics of the growth and development of Indian universities are given in Appendix I. This should interest students and research workers on higher education, and even the general reader will have a more concrete picture of the Indian university through their interpretation. A selected bibliography on Indian higher education is given in Appendix II which should be of interest to those who desire to study the present-day problems and issues of higher education at close quarters and comprehensively and intensively. The Appendix III lists most of the research work done in Indian universities on higher education through their Masters' and Doctoral theses. It also lists doctoral research work done on the subject in some of the American Universities.

I am deeply grateful to Justice N. K. Vakil, Vice-Chancellor, M. S. University of Baroda, for writing a Foreword to this book. As a member of the Gujarat Communal Riot Inquiry Committee,

his hands were awfully full and yet he gracefully agreed and wrote an appreciative Foreword. This is a great encouragement to a teacher.

In the compilation and editing of these papers and in preparing the manuscript for the press I was helped considerably by Professor M. A. Quraishi, Dr. B. P. Lulla, Shri K. C. Bhatt, Shri J. J. Gajjar and Shri D. R. Darji—my colleagues in the Faculty of Education and Psychology. To them I owe a debt of deep gratitude. My father-in-law Shri C. U. Desai and Shri J. J. Gajjar have given me a big hand in correcting the proofs and reviewing with me some language points of the manuscript. I gratefully acknowledge their precious help. I also owe an irreparable debt to my colleague Shri Navnitbhai Bhavsar for typing out the manuscript neatly and expeditiously.

My thanks are also due to the editors of the journals, where some of these papers were first published, for their kind permission to me to include them in this book. I would particularly like to place on record my deep appreciation of the keenness shown by my friend Shri Navnitbhai Sheth of Messrs A. R. Sheth and Company in seeing this book through the press in the record time of about forty days.

This volume is nothing more than an intellectual exercise done by a university teacher. In a way, it is a loud thinking indulged by him on issues that have concern for all university teachers and administrators. He makes no claim about the originality or soundness of the views propounded by him. They are at the best views developed by him through a close appraisal of the present-day scene in the Indian university, supported considerably by his perusal of studies, researches, reports and general writings done on higher education in India, the U.K. and on the U.S.A. The interest he developed in the problems of higher education through his participation in a number of National seminars and his own first-hand observation of the functioning of American, British and German Universities and discussions he had with some of their university teachers during his visits to these countries in 1956, 1963-64 and 1968, have goaded him to undertake these intellectual exercises in his leisure hours.

I hope this volume will be able to contribute, in whatever small way it can, to the understanding of the needs and problems of higher education in India among university men, students and

the public, and stimulate greater thinking and efforts towards their solution. It is a happy coincidence that this volume is being published at a time when the United Nations have designated the year 1970 the first year of the Second Development Decade—as the International Education Year and have called upon the member States including India to evaluate during the year their past achievements in education, to assess their present problems and to intensify their efforts for the expansion and improvement of their educational systems. The Central Committee of the Indian National Commission for Co-operation with the UNESCO has prepared a detailed programme for the observance of the International Education Year. One of the items of this programme relates to the emphasis to be laid on the qualitative improvement of higher education and on the provision of better amenities and facilities to students. It envisages such programmes of seminars and discussions by colleges and universities among others, which would generate penetrative intellectual thoughts among teachers and students. In this context the present volume may prove meaningful inasmuch as some of the points and views set forth here can be used as a basis of discussion.

As the volume consists of papers written on different occasions, some repetition was inevitable. However, it has been reduced to a large extent wherever it was possible to do so without disturbing the points of emphasis in the papers.

I leave it to the readers to judge the worth of the publication.

Baroda

July 31, 1970

D. M. Desai

AREA 1 •

THE PRESENT DAY INDIAN UNIVERSITIES

Looking at Indian universities a century after their foundation, one cannot but help feel that they have failed to adapt themselves sufficiently to the vast and unique opportunities which surround them, they seem to have lost enthusiasm and initiative under the crushing problems which have beset them. Despite three major Commissions, they have not been able to extricate themselves from their own brief history. With a few notable exceptions they remain examining bodies and their students naturally regard success in examinations as the sole end of an under-graduate career. As universities multiply in number, their academic standards—relative to those elsewhere—do not improve. And something even more serious than this happens—the universities remain alien implantations, not integrated into the New India as the writers of the Radhakrishnan Report (in its brilliant second chapter) hoped they might be. This is one reason why, to the observer from outside, the Indian intellectual remains a culturally displaced person, nostalgically treasuring his threads of communication with England. Notwithstanding the fact that the leadership of modern India is in the hands of statesmen more intellectual than perhaps are to be found in any other nation, there is in India (as Edward Shils recently wrote) 'no intellectual community'. This is due in part to the lack of a hierarchy of cultural institutions in the country, and this in turn is related to the fact that the universities have responded too weakly to the challenge of Asiatic culture.

— Sir Eric Ashby

THE INDIAN UNIVERSITY TODAY

WEIGHT OF PAST TRADITIONS

In India, the history of the modern type of universities is now one hundred and thirteen years old. During these years the character of the Indian university has, no doubt, changed in several important aspects. No educational undertaking, as a matter of fact, can be static and rigid for long. However, the Indian university retains still some of its earlier characteristics, colours and contours. The most deplorable fact is that years of development have not appreciably made the Indian university peculiar to India. For long the Indian university and colleges have continued to derive their inspiration and impetus for development from the British institutions. But like the Americans who borrowed their universities and institutions of higher learning from Britain, Germany and other European countries, we cannot claim that our own needs have refashioned these borrowed institutions and that our university looks "like a new creature in the educational universe."

It was a matter of short-sighted policy and an attitude of escapism on the part of the early British officials to model the first three Indian universities of Calcutta, Bombay and Madras on a foreign pattern. On considerations other than educational, they felt it worthwhile to follow the model of the affiliating and examining type of their own London University. They chose to ignore altogether the centuries long and glorious traditions of the ancient and medieval universities like *Takshasila* and *Nalanda* which were unitary, teaching and residential types of universities, and which drew eager scholars not only from all parts of the country but also from the neighbouring and distant countries. Whatever may be the reasons, the earliest policy has proved harmful to the growth of national universities in India.

Thus, India started with affiliating and examining universities. This character of the Indian university has persisted long. Though almost all the affiliating Indian universities have now assumed considerable teaching and research functions, and though we have now a number of unitary and teaching universities, the accent on universities as examining bodies has still continued.

UNIVERSITIES AND GOVERNMENT

Government has continued to control right from the beginning of the establishment of the first universities, the sponsorship of universities. This has helped universities in their early stage of growth. Because of Government control exercised through State legislation on the establishment of all new universities, India happily has escaped from the ugly situation which obtains in countries like the U.S.A. where private and occasional municipal universities are also established along with State universities. This has occasionally resulted in some of the American universities and colleges selling their diplomas and degrees. India is saved from this abuse.

Government exercises control over the universities in an indirect and small way. Still it remains a significant fact. The old tradition of the Head of the State to be the Chancellor of universities has continued to stay in the case of most of the universities established to this date. The University Acts of incorporation do require, in most cases, that the Vice-Chancellor of the University, selected or elected, be approved by the Chancellor who is in most cases the State Governor (who normally approves the nomination without any interference), the Statutes passed by each university be approved by the State Government before they come to be put into operation; and Government indirectly controls activities of a university through its annual or block grants. However, Indian universities are spared from the anxiety of State legislatures voting funds for them individually, as it is done in the U.S.A. The idea of limiting the territorial jurisdiction of each university through legislation has continued. This has both advantages and disadvantages. The advantages lay in making the control and supervision of affiliated colleges smooth and effective, and the work of conducting examinations for candidates coming from colleges spread over a large extent of area is made more organised and systematic. But the limitation is that a university is prevented from organising

extension work in centres outside its jurisdiction in fields in which it may have competent staff.

The constitution of many new Indian universities reflect the old thinking on university governance. The Acts of the universities, as they have not much changed in later years and thereby did not suit the changing needs of the fast developing Indian society, have become less effective. The Model Act Committee of the Union Ministry of Education (1965) and the Kothari Education Commission (1964-66) have come out with excellent guidelines to reform and modernise the constitution of Indian universities. Some State Governments like those of Gujarat, Rajasthan and Maharashtra have already appointed committees to review the constitution of all their respective State universities and suggest changes so that the university governance can be put on modern lines. Still, however, this process of modernising the constitution of universities is a slow one. One hopes that political, rather than educational considerations, would not ultimately decide any of the aspects of the modification of university governance.

TEACHERS' FREEDOM CURTAILED

The Indian universities began with the power to set and control curriculum development and examinations by vesting it in external bodies. The teacher in colleges and university departments who taught courses in classroom had no say whatsoever in formulating syllabus in his subject nor can he set his own tests to his own students in the light of his own teaching. A kind of distrust about the teacher's integrity and competence was the order of the day right from the early years of university establishment. In most of the Indian universities, this freedom of the teacher to set his own course outlines and set his own tests has continued to be denied or restricted. Of course, in many of the universities reforms like 20 per cent to 40 per cent weightage to internal assessment, the appointment of 50 per cent of internal examiners and some representation to teachers on Boards of Studies and Faculties have been introduced, but the teacher is still, by and large, not the determinant of those functions which are academically his own. The preponderance of external examination and its baleful influence on teaching and learning in colleges and universities are so much that someone has ironically observed that in Indian universities there is nothing else but examinations-

PARTICIPATION OF STUDENTS AND TEACHERS IN UNIVERSITY AFFAIRS

Students, teachers and university administrators constitute the body corporate of universities. But the students as well as the teachers are given hardly any share in the decision-making process of their universities. This has been a tradition which has stuck its roots deeply. But teachers and students desire to break these unhelpful traditions. They are now demanding their legitimate share in running their own universities. Teachers are particularly unhappy about a large number of nominated members on university Senates. They demand a majority representation for elected teachers on the Syndicate. They also want to enlarge the definition of teachers for the purpose of franchise in respect of the formation of university governing bodies, so as to include all teachers who are on the pay-roll of the university or its affiliated or constituent colleges.

Students have become more vocal and demonstrative recently in pressing their demands for participation in the academic and administrative affairs of the universities. Quite a number of Indian universities are having occasional scenes of strife and rioting on their campus by some sections of their student community.

In the next few years, the increasing and the insistent demands of students and teachers for participation in the affairs of their university are going to grow more and change for good or worse (the future alone will judge that) the pattern of university governance and the functioning of the Indian universities.

PRESSURE OF NUMBERS

For the last two decades, the Indian university is subjected to tremendous pressure for admission by students. In 1967-68, the total enrolment in the universities and colleges was about 22.19 lakhs in 2,899 colleges and university departments. In the last five years, i. e. in 1966-67, 1965-66, 1964-65, 1963-64 and 1962-63 the increase in enrolment over the preceding year has been 2.70 lakhs (13.9 per cent), 2.70 lakhs (12.7 per cent), 2.01 lakhs (13.1 per cent), 1.44 lakhs (10.4 per cent), and 1.12 lakhs (8.8 per cent) respectively. The increase in colleges during the same period has been 150, 177, 212, 249 and 173 respectively. More students—86.8 per cent in 1966-67 and 86.5 per cent in 1967-68—

are enrolled in affiliated colleges. This fact of mounting pressure on affiliated colleges, a large proportion of which are private with inadequate resources, has a vital bearing on the quality of education on the whole in the Indian university.

It is a disturbing fact that the Indian university, for many reasons, has not been able to be selective in its admission policy. In a way, it becomes difficult in a developing country where many under-privileged sections of the society who remained for long deprived of the educational opportunity and social and economic justice, aspire to better their lot by availing of the benefits of higher education for their sons and daughters. But there is something like mental fitness for students to be able to derive the maximum benefits of university education, as well as the ability of the State to support such education for a vast part of its population. Roughly half of the students who enter the portals of the Indian universities have neither ability nor attitude to profit by higher education. That is one reason why the rate of failures and wastage in Indian universities has been for a long time as high as over 50 per cent. And as there is little relationship with university output and the man-power needs of the nation, the unemployment among university graduates is assuming alarming proportions.

TEACHING AND LEARNING

The pattern of instruction in classrooms in Indian colleges and university departments has not much changed over a period of time. Lecturing has continued to be the principal method. Student participation in learning is small and desultory. Independent reading and the exercise of mind beyond the classrooms and outside the prescribed text books are little. Very few students develop library habit and skills in note-taking and note-making. The seminar and workshop methods of learning are followed at only few places. Teaching and testing are more information-oriented. Their methods encourage students more to memorise and reproduce. In examination the ill-digested and ill-assorted factual information. Dr. Benjamin Bloom in his report on Evaluation Workshops that he conducted for some of the Indian universities has tersely commented on students' extent and manner of learning.

—“The syllabus seems a very inadequate tool for giving direction to the learning process. While it could be the

means of promoting independent learning on the part of the students, it apparently serves to keep the student dependent upon the teacher for his learning. It encourages *the student to believe that if he remembers an accurate version of the teacher's lecture notes on each of the topics in the syllabus, he has mastered the subject.*"

—"The typical student spends less than an hour on study outside of class attendance. It is evident that girls spend more time in study than boys and that science and technical students spend more time in study than arts students."

—"In many of the better universities in the U. S. A. the student is expected to devote 2 or 3 hours of study for each hour of class time. Clearly all students do not study this amount—some do more while many do less. The reading assignments, problems to be solved and material to be mastered are such that the student has difficulty if he does not put in 50 or more hours of work in a week in study. In contrast to this, the Indian student spends only 5 to 7 hours a week for study devoted outside the class. Reports from the U. S. S. R. suggest that even heavier burden is expected of the university student there than in the U. S. and the U. K."

These excerpts throw significant light on syllabuses, teaching and learning in the Indian university.

EXAMINATIONS

Examinations as they are functioning in Indian universities and colleges are their worst feature. Mostly they are of external nature. They have very little relevance to objectives of teaching and learning. They dominate the teaching and learning in Indian universities. And they are largely invalid and unreliable, so much so that the failure of 1 out of every 5 students in university examinations is due to the subjectivity and invalidity of the examining tools and processes. It is a happy sign that some of the universities have taken effective steps to reform some aspects of their evaluation system by introducing semester system, internal assessment and grades and credit system. The number of such universities is no doubt small. But it does constitute a welcome departure.

THE ROLE OF THE U. G. C.

Indian universities are fortunate in having an organization like the University Grants Commission to help them financially and

guide and support their efforts to improve and expand their programmes and maintain standards. But for the creation of the Commission by the Government of India in 1956, the universities would have remained financially poorer and academically weaker, with their programmes of student and teacher welfare remaining limited and stereotyped.

In the fourteen years of the functioning of the Commission, several developments could take place mainly through its initiative and with its support which have largely changed the body of Indian universities. What the Indian university is today is largely due to this Commission.

Most of the universities have now much expanded and have modernised physical plants with well-equipped libraries, laboratories and workshops. The teaching of science and technology as well as medical and agricultural education in them have been placed on a much enriched and more effective basis than before. The staff-student ratio in most of the universities has improved. The salaries paid to the teaching staff which were quite poor before have been materially raised. Teachers at least in universities now have a fair deal. They have more incentives and better opportunities to improve their qualifications and academic and professional competence through advanced training in India and abroad and through programmes of inservice training like Summer Institute Courses, Workshops, Visits to other Educational Centres, etc.

Universities have moved appreciably towards curricular and examination reform. Curricular reforms like the three-year degree courses and general education are the distinctive gains of Indian universities in recent years. Postgraduate instruction and research in many universities have been considerably expanded and enriched. In some of the universities, Centres of Advanced Study have been set up by the U. G. C. Schemes of assistance to teachers for research and learned work and of honorarium to retired teachers to continue their teaching and research have been in operation. That the present day university has been able to enrich and expand its postgraduate instruction and research programme is in a large measure due to the Commission's grants and leadership.

In the field of student welfare services, precious much has been done during the last decade or so. Hostel facilities for students have been considerably expanded and improved in almost all the universities. Staff quarters are constructed on university campuses in order to increase personal contacts between teachers and

students In some universities, Deans of Student Welfare are appointed *Counselling and Guidance Services* and Information and Employment Bureaus have been set up and strengthened at some places Day-study Centres and Students' Study Homes have come into existence Most of the universities have students' aid funds and research scholarships and fellowships for them Medical and recreational facilities and textbook libraries for students, unheard of before, are now a significant development in not a few universities

Most of these developments in the Indian universities have taken place in the last ten to fifteen years It is because of these developments that the complexion of the campuses of several universities has changed And all these happy developments are the result of the liberal aid and the planned efforts of the Indian University Grants Commission The role of the Commission in enriching and strengthening the universities of today is simply great The future alone will evaluate its role properly

CONCLUSION

Such is broadly the emerging picture of the present-day Indian universities Their achievements are many and spectacular if viewed against their record in the pre-independence period However, their failures too, are many and cause concern In the words of Sir Eric Ashby the Indian universities have failed "to adapt themselves sufficiently to the vast and unique opportunities which surround them they seem to have lost enthusiasm and initiative under the crushing problems which surround them" They have remained "alien implantations not integrated in the New India" They have failed in creating what Edward Shil has said, "the intellectual community" It is for this reason that they are unable in the present critical state of the development of the Indian society and political and economic strife to serve as the conscience of the nation' What is expected of them is that they try to develop a character of their own, involve themselves closely and deeply in the critical evaluation of the social, political and economic change processes going on in the country, and meet the social, economic and political challenges that are being thrown out to them and strive to build up the 'warmth and fellowship of an academic society not divorced from the realities of Indian life. To these ends, the efforts for the reshaping of the Indian universities should be directed

AREA 2 :

EXPLOSION OF HIGHER EDUCATION

The growth of universities, in number of institutions, in size, and in internal complexity of organisation, discloses some danger of destroying the very sources of their usefulness, in the absence of a widespread understanding of the primary functions which universities should perform in the service of a nation.

—A. N. Whitehead

Having regard to the fact that we shall be endeavouring to strain to the utmost our total resources in an all-out effort to develop the national economy that there will be no slacks left or decorative fringes or border embroideries, I have no doubt myself that we shall have to restrict university education by and large to the number of university educated men and women that the country will be needing from time to time and that as regards the rest, the nation will have done its duty by expanding and extending, as well as diversifying secondary education, especially of a technical character.

—C. D. Deshmukh

THE INDIAN UNIVERSITY IN SPATE

One of the most remarkable features of the development of Indian education, since the beginning of the era of the five-year planning of national development, has been the unprecedented and rapid growth of education in all its branches and at all its stages. This phenomenon of terrific and on-going growth in the educational institutions and student population is tersely termed as 'educational explosion'.

What India failed to achieve in the expansion of education in one hundred and fifty years of the British rule, she could do in the short span of the fifteen years of her first three Five-Year Plans of National Development.

The institutions of higher education in India have been in spate. This has been both the consequence of the rapid rate and great volume of increase in the sectors of primary and secondary education and also of the concurrent phenomenon of growth noticeable in all the sectors of education including the field of higher education. It appeared that the opportunities for education that remained locked up for the under privileged sections of the society during the British rule were opened up with the attainment of freedom. A promise of a new renaissance through education appeared on the horizon. Expansion in education was both the result of the planned efforts of the national government as well as of the momentum gathered by the forces of social and economic regeneration which sought to bring about radical change in the feudal and traditional society and economy through education. The natural aspirations of a society that had become politically free looked up to education to bring about the much desired social, economic and cultural revolution. A direct link between education, national development and prosperity began to be perceived.

STATISTICS OF GROWTH . . .

A quick glance at some of the statistics of higher education in India of the British period and of the post-independence era will bear out the great fact of a rapid and large-scale expansion in higher education.

In 1855, there was not a single university (the three universities of Bombay, Madras and Calcutta were established in 1857) but there were colleges 21 in number. They had a total student intake of 3,246. By the turn of the century, in 1902, 5 universities had come to be established; the number of colleges had risen to 145 with the total student enrolment of 17,651. Besides these, there were 46 colleges of vocational and technical nature with a student strength of 5,358. The total expenditure on higher education was Rs. 26.08 lakhs which constituted 6.5 per cent of the total expenditure on education. The annual expenditure per student in colleges was 149-1.

The wheel of the expansion of higher education in India began to move fast soon after the attainment of independence in 1947. On the eve of independence the number of universities had gone up and was 21. The number of general education colleges had risen to 496 with a total student-strength of 1.96 lakhs and in the field of professional and technical education, the number of institutions of higher learning had been 87 with a student enrolment of a little more than twenty-five thousand. The expenditure on higher education had also swollen and was Rs. 578.72 lakhs which formed 12.6 per cent of the total expenditure on all education. On the side of higher professional and technical education, the total spending was Rs. 151.21 lakhs which was 3.3 per cent of the total cost on education.

In the 23 years that followed the attainment of post-independence, the numerical picture of development of higher education in India has vastly changed and is continuing to change rapidly. As against 21 universities at the end of the British rule, we have now about 100 universities, including deemed universities. In 1967-68, the number of colleges was 2,899, as against 496 in 1946-47. The total enrolment in universities and colleges was 22.19 lakhs. It will be seen that the student population in universities and colleges increases, by and large, every year by about one lakh students. The annual increase was only half of that till 1959.

The Kothari Commission has given some significant analysis of growth in student enrolment in higher education between 1950-51 and 1965-66, the period covered by the first three Five-Year Plans. At the under-graduate stage in Arts, Science and Commerce courses, the average annual rate of growth was 9.6 per cent, the same at the post-graduate stage being 11.0 per cent. In these three disciplines put together, the number of girls enrolled for every 100 boys increased from 13 to 24 at the under-graduate stage and from 13 to 25 at the post-graduate stage. In professional education, the rate of growth was faster than that in Arts and Science—it was 10.7 per cent per year, but a little less than that at the post-graduate stage.

As regards the financing of higher education, the amount being spent is so high that it would have scared the British administrators of the old days. The total direct expenditure has increased from Rs 1714.4 lakhs in 1950-51 to Rs 10,300 lakhs in 1965-66. The average annual rate of growth in expenditure during this period has been 12.7 per cent. The rate of growth in expenditure on professional education has been 15.1 per cent. In 1965-66, of the total educational expenditure, the percentage of direct expenditure on higher education was 17.2 per cent. The indirect expenditure on higher education has significantly increased from 14.8 per cent in 1946-47 to 15.4 per cent in 1965-66. The average annual cost per student in 1965-66 was Rs 328 for colleges of Arts and Science, Rs 1,167 for colleges of professional education and Rs 350 for colleges of special education. The per student average cost exceeds Rs 500. This is much higher than was the case during the British regime.

The figures quoted are eloquent. Indian universities and colleges are in a state of spate. Universities and colleges are multiplying at a rapid pace. As against one university and a dozen colleges for each of the big Presidencies during the British period, there are on an average five universities and a hundred colleges for a State. The demand for new universities is growing so strong and so rapidly that one has a legitimate fear that very shortly every district or so would demand a university. Most of the districts in every State can boast of having a college in the district town. Students are crowding in colleges. Such a development of higher education would have been most welcome, had there been committant expansion of physical facilities in our universities and colleges, the improvement of staff-student ratio and an adequate

for the authorities to provide for coordination and determination of standards in Indian universities. That vigilance for coordination and standards seems to have either gone away completely or has considerably weakened. It is wrong to by-pass the U. G. C. One would readily agree with the contention of the U. G. C. as expressed in one of its Annual Reports that "it must be consulted in good time before new universities come into being, so that proper care may be taken to avoid wastage and needless duplication of facilities, and the promotion of university education in the country, may be on a sound basis." In another Annual Report, the Commission has rightly observed, "We have expressed ourselves about the need for careful planning in the establishment of new universities. It is our strong view that new universities should be established only after the most careful examination of all aspects of the question, and that as the Law provides, an opportunity should be given to the Commission to advise on any such proposal. Our experience has been that we are either not consulted or are consulted in a perfunctory way that prevents our formulating advice properly." The mounting pressure of numbers in our universities is one of the ill-consequences of the unplanned and undue multiplication of universities in the last two decades. This position must be rectified.

The mistake is all the more grave and damaging in respect of the unwarranted growth of colleges. The setting up of a new college is not in itself a bad act. But it should be in a place where there is an increasing demand for university education. It serves no useful purpose to crowd new colleges in certain districts while others do not have any or enough even though there is a genuine demand for them. Colleges should not be allowed to be opened in cases where the commercial motive, though cleverly disguised, could be detected. In certain universities, affiliation of new colleges are sought for to get more seats on university governing bodies and thereby to control university administration. A number of colleges have been allowed to be established mainly on political, communal or such other narrow considerations. And the sad result is that the number of ill-equipped, ill-staffed and ill-financed newly established colleges has been growing every year. It is such colleges that are responsible for inflated student population on the whole. The number of students in affiliating universities continue to increase every year with the result that the running of university administration, the provision of adequate facilities for library, laboratory and workshops, conduct of examinations,

adequate student-welfare services, student discipline, and none-the-less the maintenance of the standards of teaching and learning become very difficult. This affects even unitary universities. When their student numbers increase appreciably beyond 5,000, they cease to be academically satisfactory and administratively manageable.

LOP-SIDED ENROLMENT

Another sad consequence of the unplanned growth of universities and of colleges has been the lop-sided growth of enrolment at the undergraduate and the postgraduate levels and in research and in Arts and Commerce courses. It has not been possible over the last two decades to secure a right balance between the undergraduate and postgraduate as well as research enrolments and among the humanities, the social and natural sciences and the professional and technological enrolments.

Let us first have a look at the pattern of enrolments at the undergraduate and postgraduate levels, and examine the trends therein.

In 1950-51, of the total 2.63 lakhs enrolment in our universities, 2.41 lakhs or 91.2 per cent were at undergraduate level, and only 8.8 per cent at the postgraduate level. The undergraduates in the Arts, Science and Commerce disciplines constituted a big chunk—it formed about 79.7 per cent of the total under-graduates, the undergraduates in professional courses constituting only 20.3 per cent.

The undergraduate student population has continued to soar high. It was 4.04 lakhs (92.1 %) in 1956, 4.49 lakhs (96.6 %) in 1961, and 9.86 lakhs (90.0 %) in 1966. Between 1951 and 1966, the undergraduate student enrolment in courses in Commerce has increased from 16,000 in 1951 to 62,000 in 1966. The undergraduates in professional courses have also increased from 50,000 in 1951 to 2.27 lakhs in 1966, but the increase is less spectacular than that in Arts and Science courses which is from 2.49 lakhs in 1951 to 6.97 lakhs in 1966. All these years, the growth at the postgraduate and research level, which is the heart of higher education, has remained small. Even in 1968, the student enrolment in postgraduate courses and in research constituted only 5.3 per cent and 0.5 per cent respectively.

The unrefutable fact is that the rate of expansion at the undergraduate level is unduly high. This has been mainly due to the policy of open door access operative in Arts and Commerce

Colleges. How far this high trend in expansion of higher education, especially at the under-graduate level, is harmful is indicated by the Kothari Education Commission in its following observation: "If the present rate of expansion (at 10 per cent per year) is assumed to continue for the next 20 years, the total enrolments in higher education would be between seven and eight millions by 1985-86 or more than twice the estimated requirements of manpower for national development. An economy like ours can neither have the funds nor the capacity to find suitable employment for the millions of graduates who would come annually out of the educational system at this level of enrolment." (Report, p. 305). The case for reducing the rate of expansion at the under-graduate stage in courses of Arts and Commerce through selective admission on merits and student-aptitude is real and urgent. In 1968, the enrolment in Pre-University Classes was as high as 4.85 lakhs or 21.0 per cent of the total university enrolment in that year. Colleges and university departments should be divested of the load of pre-university instruction—it must be shifted to secondary schools.

The Faculty-wise analysis of the student-enrolment in our universities is also revealing. In 1956-57, of the total enrolment of 7.69 lakhs in our universities, the Faculties of Arts accounted for 51.5 per cent students, Science 27.3 per cent, Commerce 8.7 per cent, Engineering and Technology 2.7 per cent, Medicine 3.00 per cent, Veterinary Science 0.5 per cent, Education 1.7 per cent, Law 2.6 per cent, Agriculture 1.3 per cent and other Faculties 0.7 per cent. In 1967-68, the percentage in Arts, Medicine, Veterinary Science, Law, and others has gone down. They were respectively 41.4, 2.3, 0.3, 2.0 and 0.4 but it has increased in Commerce by 2.2 per cent, in Education by 0.2 per cent, Engineering and Technology by 2.0 per cent, and in Agriculture by 1.0 per cent. The fact still remains that Faculties of Arts and Commerce between them account for as much as 51.3 per cent of university attending students. It is in these two disciplines that the reduction of student enrolment through selective admissions should be practised.

Enrolment in Humanities in Indian universities is much higher than that in many of the universities of Europe, Africa, Australia and Asia. It is 30.7 per cent in the U. K., 36.1 per cent in Canada, 25.3 per cent in France, 23.0 per cent in Germany, 17.2 per cent in Italy, 15.0 per cent in Japan, 17.5 per cent in Australia, 11.6 per cent in Iraq and 24.66 per cent in Egypt.

It is a happy sign that the proportion of students in science courses has been steadily increasing—it was 27.3 per cent in 1957, 30.0 per cent in 1961, 32.7 per cent in 1966 and 33.3 per cent in 1968. Still, however, the proportion of students taking courses in Science, Engineering and Technology, Medicine and Agriculture is small—it was 44.4 per cent in 1968; but if 33.3 per cent of enrolment in courses in science is deducted from this, the lop-sided growth of student enrolment in Engineering and Technology, Medicine and Agriculture reveals itself.

CONCLUSION

Indian universities have been in *spatte* for a long time. It will be harmful to continue the present *laissez-faire* policy. The argument on socio-economic grounds that any change in the current policy would adversely affect the under-privileged groups has not much educational and economic validity. Even now these groups have a very small proportion of college-going population. Their share in the utilization of the existing facilities of higher education is too much disproportionate to the size of their population. As the Kothari Commission has truly observed, "This inequality would be removed more quickly, not by continuing the present *laissez-faire* policy, but by adopting positive measures to promote equalization of opportunities, such as, the grant of scholarships on the 'school cluster' basis". (Report, p. 97)

Again, the effective dispensation of higher education requires adequate physical and material facilities. It requires learning and teaching tools of various kinds and nature, besides more class rooms for instruction, practical work and training and halls for library, hostels, and student welfare activities. In our country, in most of these essentials of higher education, we do not have even the minimum.

There is something like a relationship between a country's ability to provide university education for a large number of aspirants and the per capita income of the people. It is a basic fact that our national income cannot bear the burden of the high cost of university education for a fast expanding students population. No country of the world has sought to provide university education to its population as a matter of a universal right.

It is true, our good students compare very favourably with the good students of any university in any part of the world.

But, we have a very high proportion of students in our universities who are of very poor calibre and motivation. As it is stated in one of the Annual Reports of the U.G.C. "Nearly half of all the students who enter the universities, including the pre-University Class are not able to complete their first degree course successfully during the normal span of time provided for the course, and this is all the more disquieting when we remember that on an average half the number of boys and girls who complete their secondary education fail in the school leaving or equivalent examination". Thus there has been an on-going appalling wastage in higher education in terms of time, energy and money expended on running institutions of higher learning. This wastage needs be checked and reduced.

It will be, thus, in the national interest that the expansion in Indian universities is controlled as a matter of policy through planned efforts !

LIMITING NUMBERS IN UNIVERSITIES

Among some very crucial problems facing our universities today—is the extremely perplexing problem of limiting the number of students in our universities. We have, in our country, two strong categorical views on this issue, one which maintains that there is no case for limiting admissions to our universities and the other pleading vehemently for restricting the enrolment in universities in the interest of saving the rapidly deteriorating standards from utter disaster, and combating effectively the two arch enemies of our educational system, viz. wastage and stagnation. I opt for this latter group. I strongly feel that time has come for courageous thinking and bold decisions by our university administrators.

Some time back there appeared some shift in thinking of the government and university administrators. For instance, at the second Vice-Chancellors' Conference that was held at Khadakvasala in June 1960, it was held that the proportion of university students in India was only about 2 per 1000 of population as against 20 in the U. S. A., 15 in the U. S. S. R. and 9 in Japan, and, therefore, the increase in numbers of university students should not be looked with much apprehension. Again, it was held that the students educated in the Third Plan period would be needed for employment during the Fourth and Fifth Plan periods when the increased tempo would probably require a large number of suitably qualified persons. It was also maintained that some methods of selection were being employed in all professional institutions and in some good institutions in the country. I do not share the views of this august body of the administrators that there is no case for limiting numbers in our universities.

My first thesis is that expansion in enrolment in our institutions of higher education in the last fifteen years has not been commen-

surate with the capacities of these institutions to provide that quality of education which is expected of them. It will be readily agreed that the Nation expects that the institutions of higher learning should produce a selfless, intelligent, well-informed and even creative leadership which is a direct consequence of high standards of general, vocational and professional higher education. Dissemination of learning, high quality of research and incessant search for new knowledge and its application, development of wholesome attitudes and expanding specialised and comprehensive interest, enrichment of productivity by awakening and harnessing the individual's creativity, are the vital tasks of higher education. In addition to these, our universities have to effect a subtle balance between tradition and experiment, between stability and change, between the values of the past and the challenges of the future. Is it possible for our institutions of higher learning to discharge such vital and cherished responsibilities with the unbearable pressure of numbers mounting year by year? Statistics show that over a period of the last 15 years, the enrolment in our universities had increased by 270 per cent, a record figure for any developing country. In the case of professional, technical and other special education the increase had been still higher. It was 369 per cent. We would have welcomed this expansion as a record of proud achievement had there been commensurate expansion of institutions, recruitment of teachers, library facilities, laboratory enrichment, hostel increase, etc. Between 1950-51 and 1967-68, the universities and deemed universities have increased only by 72 from 28 to 100, colleges by 1934 from 965 to 2899. The former teacher ratio of 1:30 could be brought down, despite high financial provision for higher education, only to 1:18.7 which is still high to provide good education. This means poor personal contact between teachers and students. It also means very little chances for the adoption of seminar, discussion and workshop methods of teaching in the classroom and perforce resorting to lecture method.

There is another pertinent point. In U. K., universities have an average of 4000 students, whereas in India it is about 22,000. The public expenditure per student per annum in the U. K. is equivalent to Rs. 5000, in India it is even lower than Rs. 500. The other day, it was said that the teacher-pupil ratio in our engineering colleges is 1/5th of what it is in the States. Thus, in India to attain the level that America has reached in engineering and technology, it would mean expanding our teaching and research

staff in this vital field about 50 times or 5000 per cent. These figures speak for themselves. Should we continue to enrol more and more students in our institutions when we do not have necessary facilities in terms of buildings, classroom, libraries, laboratory equipments, etc ?

My second thesis is that let us produce what can be consumed. We were told that by the end of the Third Plan there would be about 7.5 lakhs of educated unemployed despite the provision of Rs. 10,000 crores for creating employment opportunities for about 17.5 lakhs of educated persons. In fact the figure of unemployed educated persons is becoming frightening. Their number rose by 13 per cent during the first half of 1969 on the live register of the Employment Exchanges. There were 8.75 lakhs matriculates, 1.86 lakhs graduates and 53,118 engineers on the register in June, 1969. Why then aggravate the baffling problem of educated unemployed by continuing to admit students in our colleges indiscriminately ?

My third thesis is that all the students that are admitted in our universities year after year do not have the capacity, aptitude and interest to profit by higher education. Screening is, therefore, not only in the best interest of the standards of higher education but in the interest of the students themselves. We have reasons to believe that the alarming proportion of failures in almost all university examinations today is predominantly due to inherent poor mental equipment and immaturity of the students. Much of the wastage of time, energy and money expended on educating a good proportion of wrong type of students, and the latters' pangs of frustration can be saved if university admissions are limited to students who are mentally well equipped to profit by higher education. It is true, in democracy, equality of opportunity for all is the idea. But this does not mean identity of opportunity for all. It means equal opportunities to individuals according to their capacity. It means that the able poor student should not be handicapped in getting higher education on account of his poverty, and that the rich student with no ability should have a chance to jeopardize his own and others' education by adding to the burden of a system which is almost on its breaking point. It is the presence of these immature, maladjusted students of poor calibre which is at the root of the present chronic problem of student indiscipline.

My fourth thesis is that indiscriminate admissions to universities and colleges are neutralising the efforts made to improve educational facilities. The government spends on universities about six times more amounts today than what it used to do twenty years back. We have now more and better buildings, hostels, enriched and expanded library and laboratory facilities, smaller teacher-student ratio than in the past. And even then we continue to be dissatisfied with the quality of our higher education.

My fifth and the last thesis is that there must be an organic relationship between the turnover from the universities and the national needs of manpower. Let there be an all-India survey to indicate the nation's needs for Arts, Science, Commerce, Medical, Law, Engineering and Education graduates. Let us gear the admissions to universities to the divergent needs of public life !

AREA 3

FUNCTIONS OF MODERN INDIAN UNIVERSITIES

In the present age of science and technology universities have acquired a new role and a new significance. It is the universities which provide the focal points for importing, and also exporting, knowledge from where it is in abundance and transmitting it to the local community. They alone, or at any rate, much more than any other agency, function as the 'ports of commerce' in the great ocean of international science. They act as powerful 'pumps' drawing science and technology from 'advanced' countries, and creating more in the process, and spreading it wide to irrigate the native soil. But if the universities in a developing country are to truly serve their country, they must be close to the native soil, close to the poor and the needy. They must be close to the people and to their aspirations and close to government.

—Professor D. S. Kothari

SOME VITAL FUNCTIONS AND RESPONSIBILITIES OF PRESENT DAY INDIAN UNIVERSITIES

7

THE KNOWLEDGE FUNCTION

The basic function of a university at all times and in all climes has been to pass on the heritage of the accumulated knowledge to new generations of young men and women and to those of the older generations who have a thirst for the acquisition of such knowledge through a programme of extension and extra mural lectures (Of course, knowledge would include skills and competence to use the acquired understandings and skills in known and unforeseen situations)

The function of a modern university, however, is not limited to mere transmission of knowledge and the cultural heritage of the mankind. A modern university is expected also to go on assessing and evaluating critically the knowledge built up in different scholastic disciplines, reshape and modernise it and create new knowledge. The explosion of knowledge in the last two or three decades has been simply fantastic—it is much more than what was developed over a period of centuries. The knowledge function of a university has, therefore, acquired a new focus and an edge which is to disseminate it adequately and effectively to those who enter its portals and to endeavour continuously to maintain the standards of its teaching, training and research undertakings.

The scope of knowledge with which a university is concerned has, however, been considerably widened. It is not merely limited to liberal arts and mathematics as was the case in the past. It is extended to science, engineering, technology, medicine, agriculture, law, education, social work and even fine arts like music, dancing, dramatics, painting, sculpture and so on.

Scholarship pursued in a university is no longer valued for its abstruseness and for its own sake without any concern for its use in the service of the society. The 'ivory tower' functioning of universities, which was the case in the past, has been broken appreciably if not completely. The teaching, training and research pursued in the portals of a university in different fields of knowledge have acquired an accent on their usefulness to the society. But the Indian universities have not been able to come out completely from their ivory tower mantle. The built-in traditions and attitudes over a long period of time do not so quickly change. But the process of change has started and the result is not discouraging.

ACCENT ON METHOD

The Indian universities have, over the period of the last century and a quarter, mostly concerned themselves with the transmission of knowledge. They have not bothered themselves about the method and manner of this transmission. Excepting in the case of a small minority of intelligent and highly motivated students, the acquisition of knowledge has been largely a mechanical and passive reception of information and loose bits of knowledge. The development of an inquiring mind in students, the building up of habits of independent study, creation of an attitude to exercise the mind creatively in the solution of problems, inculcation of wide interests and aptitude, development of a sense of value for manual work, the installation of love for community service and development of integrity of character—these are some educational outcomes which have been, for long, left to chance.

This function was implicit in the function of dissemination of knowledge effectively. But it has been almost neglected. Because of this lapse and the out of proportion emphasis placed on examinations, the average Indian student has learnt to equate university education with the acquisition of degrees for the purpose of obtaining gainful employment. And the average university student has become a mere carrier of a load of information. Gandhiji described such a student as an academic coolie.

CREATION OF INTELLECTUAL COMMUNITY

This is one reason why an Indian university has, by and large, failed in its vital function to create an intellectual community which can serve as 'conscience of the nation'. Indian universities have to be assessors of the national life. This function is all the more

crucial against the fact of a vast bulk of illiterate masses and the consequent absence of an enlightened public opinion in the country.

The need for assuming this function by Indian universities has been very well made out by the Kothari Education Commission: "There are so many new pulls and forces (as well as old ones) operating in our national life—as indeed in the life of a man as a whole—that its balance has become precarious; and there is a danger of losing our bearings unless universities are able to play this role adequately by involving themselves deeply in the study and evaluation of the social process." (Report, pp. 275-76)

Only through the adoption of dynamic methods of teaching and learning, the universities will be able to exercise their functions of effective leadership training, and activate the process of social change.

FORMATION OF VARIETY AND DISSENT

In this context, another function assumes great importance. University administrators and teachers expect and reward obedience acceptance, conformity, quiet and respectful attitude from the student community. Very rarely the clash of minds between administrators, teachers and students are encouraged or given an effective scope. This attitude and practice is harmful and damaging in the larger interests of a developing society. The Indian universities should, therefore, make it as their special function to encourage individuality among teachers, students and even administrators.

Variety and dissent in a climate of confidence, decorum and tolerance are conducive to intellectual growth which is of vital benefit to a university itself and to the community it serves. Of course this dissent is to be genuine and not merely superficial or artificial or mischievous. The efforts of a modern university should be directed towards effecting a change in the situation described by the Kothari Commission in the following words, with whatever consequence it has to face. "The general tendency (in the Indian university) is to produce the organization man who is afraid to challenge the accepted pattern of social behaviour and social institutions at the intellectual level and who is too often anxious to worm himself into the good graces of people who count so that he may be able to 'get on' in life. A university should have no truck with this type of mind." (Report, p. 276)

NOT A COMMUNITY SERVICE STATION

It is true that a modern university has to be responsive to the needs of the society and play its part in its improvement; it

is expected to participate in and contribute to the social change process. However, its function is not to serve as a community service station, and to respond to each and every popular demand. It has to decide for itself what needs of the society it should rightly fulfil. It should learn to balance itself carefully between "commitment and detachment—commitment in action and detachment in thought". It should critically assess each situation of its social participation and decide for itself after weighing carefully all the pros and cons of the situation where to support and where to oppose, and where to identify itself and where to detach itself. It should adopt a critically evaluative, challenging and dynamic attitude. And the same it should try to instil in its own students and teachers and extend it to the general public to the extent that is possible for it.

PARTICIPATION OF TEACHERS AND STUDENTS

With all this, the accent in our universities should be on a larger participation of teachers and students in their decision-making processes. Faith in the integrity and honesty of purpose of teachers and students will beget faith in university administrators. If this faith is created, if communication with teachers and students is improved, if better human relation is practised in regard to them, the distrust and the consequent strife between administrators and teachers, and teachers and students will be considerably reduced. A university will be able to perform many of the functions which they find it difficult at present, if a better and more fruitful interaction among all its constituent members and sections can be started.

It should be noted that the present day student, teacher or a clerk in the university office is very much different from what was the case some years back. They are more conscious of their rights. They are more assertive in their demands. The political situation in the country—the pulls and pushes in the nation's political parties—has its impact on the changed behaviour patterns of these categories of persons. This fact should be realistically faced. And the Indian university should learn to function in such a way that this new upsurge instead of becoming a destructive force, can be sublimated and harnessed in the service of the fulfilment of its new and challenging functions.

The old ways of functioning should change, yielding place to those that can meet with the new challenges of the time !

INDIAN UNIVERSITIES AND THE EXTENSION WORK

Indian universities, throughout their period of growth and development, have primarily concerned themselves with their triple functions of teaching, training and research. These three functions have remained largely restricted to those young men and women who enter their portals as regularly enrolled students.

There is no doubt that in the last twenty years those who have received the benefits of these three functions have greatly increased in number. New dimensions, new breadth and depth have been added to these functions of the universities and advantages of better governance and more internal autonomy and autonomy in relation to outside agencies have accrued. The ivory isolation of universities of the past from the community has broken down. This is reflected in the vastly expanded and changed curricula and programmes of universities in various branches of knowledge and in the areas of professional training. But modern universities have another vital function—the function of extension—which takes them directly into the community, expanding their clientele, extending their services to thousands of adults who work on farms, in industrial plants, in trade and business concerns, in public administration, in schools and in such other walks of national life.

It is true that Indian universities have accepted the ideology of extension of teaching, training and research to the local and surrounding communities. Most of the University Acts do provide for extension work in the functions they enumerate for the universities. Occasionally, debates and discussions do take place in university governing bodies on the extension work which universities should undertake, which would bring about their direct contact and involvement with the community. But the extension function of Indian universities have not moved much beyond

'occasional' extension or extra-mural lectures. And this happens also only in few progressive universities where the Vice-Chancellors have faith in and fervour for such a programme, or someone in their Syndicate or Senate goads them into such activities. In universities where they have Departments or Colleges of Education, Agriculture, Home Science, and Social Work, considerable activities in extension services to schools, to farms, to house-wives in the community etc take place. But barring these, it will be more correct to say that extension has remained a far away cry from the main current of thought and activity of Indian universities

THE GROWTH OF THE EXTENSION IDEA*

The idea of university extension is originally a British idea. The British Universities were the pioneers in extending "the resources of their campuses to the people."

The movement for extension work by universities began in Britain in a vague and slow way in 1840, seventeen years before the first Indian universities were established. The recognition of the idea that the university should extend its services to a large clientele outside its campus led, in a way, to the establishment of the Ruskin College, Oxford, the Working Men's College, London and the Owens College, Manchester. But it was only in 1873 that the university extension work can be said to have begun in an articulated form. The high distinction in this respect goes to the Cambridge University which set up in 1873 a Syndicate of extension lectures which was, in a way, the first organizational set-up created for university extension work. Thus, initially university extension work was in the form of extra-mural lecture series delivered by some prominent university professors for the benefit of the local community.

In England, the movement for adult education through university extension received a fillip from conditions of life created by the Industrial Revolution and the process of urbanisation that began in its wake. Some prominent teachers of the Oxford and Cambridge universities, some churchmen of vision and social fervour and some social minded elite of the society joined their hands for the establishment of a community-service organization which they called 'settlement'. First such 'settlement' came up in

* This Section is based on a Lecture by Dr. M. S. Mehta, the Ex-Vice-Chancellor of the Rajasthan University and a Radio Broadcast by Dr. Paul H. Stuart, Dean, the University of California Extension.

East London; later on the Oxford and Cambridge Universities set up their own settlements. "Though primarily and originally the settlements were conceived as a social bridge over the widening gulf separating the 'depressed industrial proletariat and the privileged elite, they also became active centres of adult education". Some of these settlements moved beyond the work of social reforms and organization of extension lectures—they provided for instruction for the working men so that the latter can take up the external degrees of some universities.

The Workers Educational Association (WEA) had almost become a legend in Great Britain by 1903. Albert Mansfield, Balliol and others worked towards bringing the working class organizations in touch with university extension work. In the next thirty years after the beginning of the university extension work in a vague form, the movement acquired definiteness and gathered momentum and strength through the collaboration of the British universities and the Workers Education Association Joint Committees in what they began to call 'tutorial classes' for the people which came to be set up at Oxford as well as at other universities and university colleges.

The First World War took the movement further and made it stronger and more extensive. The Adult Education Committee of the Ministry of Reconstruction recommended that "there should be established at each university a Department of Extra-mural Adult Education with an academic head. This led to a number of universities in Britain taking up university extension work. Between the period of the end of the First and Second World Wars, most of the British Universities had set up Departments for adult education through extension work.

Though Indian Universities derived their inspiration all throughout the British rule from the British universities, they did not do much in respect of university extension work. Many Indian social leaders who were the products of Indian universities did a lot in organising and spreading the movement for social and political reforms for the masses. But universities themselves did not become the centres of such movements and extension work. The main reasons were perhaps two. Firstly, the Indian universities were largely dominated and controlled by the British officers who were not actuated with the same humanism and idealism for social and adult education work as was the case with their contemporary university men and officials of the Oxford and

Cambridge Universities of their own mother country. Secondly, because no real Industrial Revolution took place in India till recently and the process of urbanisation was also on a limited scale. Adult education through university extension work is dependent upon both the conviction and zeal of university administrators as well as university teachers. In Britain, both the components favoured the idea and participated in carrying the benefits of university instruction to the local community. In India, the university administrators were not enthusiastic about extending the functions of universities for community development on political and financial grounds, the university teachers—at least those who were of a nationalist bent of mind—must have been interested in such a work, but under the then existing administrative set up of the Indian Universities, they had very little scope to translate their interest into actual programmes. Moreover, a large number of Indian universities had continued to be affiliating and examining bodies and as such it is natural that they might not have interest as well as means to undertake university extension work.

In 1837, the idea of university extension work travelled from Britain across the Atlantic. But much earlier than this, the idea of university extension had already found an expression in the U S A. A professor of John Hopkins University had advocated extension work by the university. In 1830, Professor Silliman of the Yale University had begun giving popular lectures in natural sciences. In a letter written by one Dr William Channing to the then President of the Harvard College in 1835, the idea of extension work by the university was well spelt out "The education of the people seems to be more and more the object to which the college should be directed." In America, the Land Grant College Act of 1862 also had helped in no small way the spreading and strengthening of the movement of adult education through college extension work.

John Hopkins, Wisconsin, Chicago, Minnesota and California were among the first pioneering American Universities that began extension services and applied their minds and resources earnestly to develop a really fruitful programme for the adults of their society. In 1915, the National University Extension Association was founded in the U S A. and the movement gathered momentum.

The revitalization of the idea that colleges and universities had responsibilities for the distribution and the use of knowledge,

as well as for its production, had two main outlets. First, the large private and state universities began to develop administrative structures and facilities to organise and staff the extension services. Secondly, the urban colleges and universities began to recognise that with the rapid urbanisation of the nation, there would be increasing demand by part-time students for evening and Saturday classes to brush up their knowledge and increase their competencies to qualify for the challenging tasks created by the process of change. The extension idea began to develop rapidly in the U.S.A. and took the shape of University Extension Divisions and evening colleges after 1940. Today, university extension services have become as vital a component of American universities as their programmes for regular students. According to a study made by the National Opinion Research Centre in February 1963 on the basis of a scientific sample of American adults, 2,640,000 individuals had participated in courses or programmes offered by colleges and universities.

This trend has continued to be stronger in American colleges and universities. There has developed a strong concern among them to seek to extend the resources of the campus and to make their institutions as useful as possible to the community of which they are a part.

The British idea of university extension work has now spread to a number of countries. Canada, Australia and several European countries have a well-developed and effectively administered programme of adult education through university extension work. Universities and other educational institutions of communist countries have even more firm and extensive programmes. Evening colleges, correspondence courses, tutorial classes, mass communication media like the radio, television, films are all used as agencies and tools of university extension services. When most of the universities in the U.K. and U.S.A., 20 universities in Canada, 7 State Universities in Australia, almost all universities of communist countries, a number of universities of European countries and universities of our neighbouring country Japan have taken up the function of extension services to the community, there is no reason and valid justification for the Indian universities to lag behind in this crucial development.

PHILOSOPHY OF UNIVERSITY EXTENSION

The complexity of life and the various tasks and jobs that one has to perform have become so complex that the need for continuous learning—nay even life-long learning has never been felt so keenly before as it is the case in the present times. Therefore, the rapid and extensive dissemination of new knowledge and the feeding of it in the solution of a host of problems, faced on personal level by individuals and by the society on the national level, have become urgent and crucial tasks. This would constitute a national effort to be made in a big way. All educational agencies, both formal and informal, schools, colleges, and universities, the Clubs and Associations, the films, the drama and the radio—all have to be pressed into service in this big task. A lot has to be done. The traditionally oriented Indian Society is to be modernised through the application of a science-based technology. Human resources in the country are to be developed to the possible maximum extent. Education is to be used on a large scale as an instrument of social change. The knowledge and skills of all those thousands of industrial workers who are involved in the work of economic production and development have to be made up-to-date and their effectiveness to be increased.

These are the vital and urgent tasks. As it is said earlier, the participation of several formal and informal agencies in this task would be very necessary. Colleges and universities have to play in this respect a more direct and a bigger role than before, because they are better equipped to do so.

Other needs are also coming up into sharp focus. New knowledge is so rapidly being produced that unless universities and colleges are prepared to extend their campuses right into the community, a cultural lag is likely to result which would be harmful. The failure of the university to disseminate new knowledge and skills would weaken our efforts to develop our national economy through production and slow down the pace of the modernisation of our traditionally rooted society still believing in superstitions and living on "unscientific beliefs and practices." As one American educator has said, it would also mean in certain vital fields like the health sciences "the difference between death and survival of a patient in a hospital remote from the centre of research and new technology."

Not only the knowledge of workers in the field of professional, social service and public administration need to be made

uptodate, the awareness of the common man to great many political, social and scientific changes that are taking place is to be created and augmented. The correctly informed and better informed adult becomes not only an economic asset but a better citizen also.

The idea of continuing education is the basis of university extension services.

RANGE OF OFFERINGS

The range of offerings by American universities in their extension programmes is wide and diverse. To quote an American source, "they range all the way from formal courses, parallel to those offered to resident students, to post-graduate programmes for members of professions". Legal practitioners, practising dentists, doctors, businessmen, teachers, engineers, administrators—all are served by the universities through these programmes in such a way that they are able to perfect and make uptodate the knowledge and skills they had acquired in their professional training ten or twenty years earlier. In humanities and behavioural sciences they have perhaps the largest enrolments. Inter-disciplinary programmes are getting more frequent and popular. Some American universities like the California University have begun to offer post-graduate medical programmes even outside their own country, in Japan, Hong Kong and Mexico city.

In India, Indian Universities have not moved towards providing formal courses leading to diplomas and degrees through extension programmes. However, in certain areas, they have been recently providing fairly good extension services.

Most of the University Departments of Education that have an under-graduate wing, besides the post-graduate commitments, have Departments of Extension Services. They came into existence in 1955 as a result of the financial help from the Centre and the U. S. A. agencies like the Ford Foundation and the Technical Cooperation Mission. These Departments have been extending their inservice teacher education programmes, consultation and guidance services and resources to secondary schools situated in their neighbourhood and have been doing a precious job in helping the schools to be better schools and teachers to be better teachers. The range of their offerings is quite wide. They undertake to impart to teachers in position in schools new knowledge in fields in which the universities had no provision previously in their

under-graduate programmes, they introduce them to new ideas and techniques in curriculum planning, classroom teaching and testing, help them in institutional planning, train them for test construction, vocational and educational guidance, the effective use of audio-visual materials and aids, preparation of resource teaching units, in the use of the technology of programmed learning and several such other instructional innovations. This has been a great extension service, the impact of which on the improvement of the quality of secondary education is appreciable.

Some of the University Departments are also working by going into rural communities to improve their health services and habits, to bring rural schools and rural communities closer to each other, to train rural school teachers to play a leadership role in the improvement of the life of their local community. The University of Baroda has, for instance, a Rural centre called CRTSE to offer these services. The University has also extension programme in rural community development, in Home Science, in Social Work, in the Department of Education. Recently, the Baroda University has undertaken a big project on Baroda city Development and Planning studies which seeks to study the problems created by the rapid changes and the growth of the Baroda city and evolve comprehensive plans for the development of the city. This envisages a close collaboration of the University Departments of Architecture, Economy, Sociology, Political Science, Education, Psychology, Social Work, Demography Centre, and the Baroda Municipal Corporation. This marks a significant development in an Indian university to study and assist in the process of town planning and development.

Besides the University Department of Education, some of the Departments in the Home Science have been doing some significant extension work in surrounding communities. The Sardar Patel University of Vidyanagar has been disseminating the scientific ways of cooking, facts about balanced diet, personal hygiene, child upbringing, etc., basing its approach on conditions and materials available in rural homes and which could work well in rural setting. The Vidyanagar Agriculture College has a fairly well developed extension programme in agriculture which has played a significant role in improving farming in the Kaira District in which the University is situated. The Baroda Home Science Faculty has also good extension programme for the surrounding community in foods and nutrition, in home decorations,

'clothes-making,' etc. It also provides specialization courses in Extension Education to prepare this kind of workers. The Gram Sevikas were trained by this Department at one time. In the restricted sense of the term, several Departments of the Baroda University do extension work to the community. The Faculties of Social Work and the V. T. K. Institute of Rural Development of the University have regular training programmes for training village level workers and to upgrade the skills of extension workers. The same may be the case with other progressive universities in the country.

Many agricultural colleges and universities in India have a well organised and well articulated programme of extension work. Their major objective has been to take the technical information now available in agriculture to farmers so that they can place their farming on scientific lines which would ultimately result in increasing the farm-yields. With increased and better farm produce, not only they are able to help the nation in tackling the big problem of food shortage but are able also to raise their own income. The agricultural college does its extension work mainly through the village level worker or the Gram Sevak. As it is this worker who functions very closely to the farmer, the success of the extension work of agricultural colleges depends largely upon the efficiency and the attitude of the Village Level Worker. It is through the work of the Village Level Worker that farming is sought to be improved. It is done by demonstrating the use of fertilizers, improved seeds, better irrigation, drainage, etc.

The Kothari Education Commission has suggested a programme of betterment of agricultural extension work which has relevance here. It has recommended establishment of Primary Extension Centres. The Agricultural Universities and Colleges can fruitfully use the agency of these Primary Extension Centres to provide a more effective mechanism for the demonstration of scientific farming. The organization will take the form of good farms of adequate size which would run on scientific lines. "The very existence of such a farm within easy distance from the very home of every farmer where he can see better agriculture being practised and made to pay would, in itself, be extension work of very great significance." (Report, p. 363) The Commission has also suggested that these Centres may be utilised for giving part-time agricultural education to the school-leavers who are actually engaged in farming.

The Commission has reiterated the importance of extension work in agricultural colleges and universities. It has expressed itself very strongly in favouring agricultural universities. "These Departments should be able to call on the appropriate faculties and specialists of the entire university staff, all of whom should have some responsibility for extension work."

The American Universities have approached the problem of extension work to community from the point of providing continuing education. As Paul Sheats had said, in his broadcast through "*Voice of America*" that more and more of the universities, efforts in the area of continuing education were being devoted to the creation of programmes "which serve not only the man and woman who have been to college, but the the professional engineer, lawyer, scientist or teacher who wishes to be on the top of the latest developments in the fields".

The Kothari Education Commission has strongly pleaded for the change of the image of the university as a closed community of scholars and for linking the life of the university with that of the community for the mutual enrichment. The Commission has said, the function of the university is to help the social, economic, educational and cultural growth of the community it serves. It has emphasised on the part of the university the responsibility to communicate to the people the new scientific findings and new thinking on social and economic problems. It has particularly emphasised the responsibility of the university to undertake a variety of programmes for the re-education of the key personnel of different professions. It has recommended that all educational institutions including universities and colleges should be "encouraged and helped to throw open their doors outside the regular working hours to provide such courses of instruction as they can to those who are competent and desirous of receiving education."

The Commission has suggested several programmes which Indian universities should undertake with advantage in adult education. They include organization of evening colleges for adults who are employed during the working hours and to prepare them for university examinations; the organization of special study groups and short term special courses for professional benefits, the provision of a variety of extension programmes including lectures, field work, demonstrations and cultural and recreational activities, organization of social camps, adoption of villages for intensive

programmes for development and eradication of illiteracy, maintenance of schools, the improvement of agriculture, local industries, the working of cooperativeness and similar community services

The Commission has stressed the continuation education programme through *ad hoc* as well as regular part time courses, evening colleges and correspondence courses. These courses offered through part-time classes and correspondence courses should reflect the varied and real needs of adult education, some of which at least should be such as to be able to help people to understand and solve their problems and to acquire wider knowledge and experience. The Commission has rightly looked upon correspondence courses as a method of taking education to the millions who depend upon their own effort to study whenever they can find time to do so.

The Commission has also rightly observed that for discharging its obligations of these types to the community, each university should have a Board of Adult Education, with membership drawn from all its Departments which would do adult education work and which should, therefore, be involved in preparing plans of adult education programmes and in executing them. That universities would be adequately equipped and financed by the U G C or the State Governments so that adult education programmes can be undertaken by them without further load on their already strained finances goes without saying. In the U S A, American universities and colleges have been playing a big role in a big way in adult education, because they are given adequate funds for that work.

CONCLUSION

There is no doubt that the changed time and needs of the modern Indian society demand that like universities of other progressive countries, our universities, too, should shake off their exclusive concern with adolescence and youth and should take upon themselves the new responsibilities for reaching out to the adults in numerous ways in which they can. A time has come when Indian universities while continuing to cater to the varied and expanding needs of those who attend their regular courses of instruction as enrolled students should move out into their local and surrounding communities, and accept, as much as their resources of men and material can permit, responsibilities in adult education through extension work. The university as well as the adult education should both expand their concepts so as to pave a way for the development and implementation of this

new emerging concept of universities and a greater inter-action between scholars and the society.

India should follow the footsteps of progressive countries of the world. Most of the universities of the U.S.A., Canada, Great Britain, Australia, New Zealand and Japan have Boards or Divisions of Extension Work. It is possible that because of inadequate funds placed at their disposal, Indian universities may not be able to undertake programmes of adult education and extension work on a large scale as it is done by the western universities, but they should set up on a modest scale Departments of Adult Education to take upon extension work in an organised manner on a scale that is feasible. They should work in liason with the Ministry of Broadcasting and Information in developing and monitoring programmes of extension work through radios, televisions, and documentary films. Soviet Union, Australia, Germany, Italy and Japan have used the medium of correspondence courses for university extension work with remarkable success. Our universities should endeavour to profit by their experiences. A considerable amount of experience and a vast literature on the subject are available. They should be profitably used.

Indian universities should shake off the prejudices and complexes against the adoption of a system of enrolling private students, holding evening and night colleges, using correspondence courses, seminars and workshops in higher learning, etc., if at all they are prevailing on their campuses. They should accept whatever media and tools that can help in taking knowledge and skills right into the homes, farms, factories, schools and offices in the community. They should strive to set up a variety of extension work programmes such as public lectures by experts, framing of *ad hoc*, or short time courses on a part-time basis for special groups of people in the community who need them, provide continuing or further education, organise forums, study circles, refresher courses, seminars and workshops, and such other media of continuing adult education. As emphasised by Dr. V. K. R. V. Rao, the Union Minister of Education and Youth Welfare, on many occasions, our universities should endeavour to play a more and much larger role in the field of education than contemplated so far especially in the context of our developing economy and our desire for the establishment of a democratic and socialist society. If the four categories of work—(1) the work of adult literacy serviced by the staff and students of the univer-

sity. (2) the formal education for adults, who desire to improve their qualifications on a part-time basis through evening colleges, (3) the further education through correspondence courses to those who are not able to take up full-time or part-time education for one reason or the other and (4) through research, training and publications—that Dr. Rao visualises for the Indian Universities are taken up, the movement of the adult education, both at the literacy and continuing higher education levels, will make a real headway.

Universities in India have a special responsibility for the promotion of adult education. They should not try to escape this social obligation. With a positive will to act and with better finances made available to them, Indian universities should be able to join the community of universities of progressive countries of the West and the East that seek to serve their communities well. The present and future generations will not forgive our universities if they fail to discharge this social obligation.

ASSOCIATING UNIVERSITIES WITH MANPOWER PLANNING

Since universities play a major role in the education and training of high level manpower, educationists all over the world regard the association of universities with manpower planning as of crucial importance. In fact, a recent study on the problems of unemployment among university graduates in India, sponsored by the Institute of International Studies of the University of California, seeks to examine the extent of, and the arrangements for associating the universities with manpower planning in India.

DESIRABLE BUT NOT EASY

Universities and colleges in India are regarded as the major agencies for manpower development. India is a democracy. The natural implication of both these facts is that universities and colleges in India should be associated closely with the manpower planning. This is indeed desirable, but it is not so easy.

In a totalitarian state, it is easy for the government to decide before-hand who should go to colleges and universities, and how many of them should go to technical, engineering, medical, science, agricultural and other types of colleges. It is easier for such a government to do so because it can control demands and supply in the market. And it knows exactly what to do with its matriculates and non-matriculates. Planning in the case of such a political set-up is a comparatively smooth and sure affair.

But in a country like India, to attempt manpower planning to such an extent of details and precision is not an easy exercise.

SEVERAL QUESTIONS

Manpower planning of high level personnel in India raises several vital questions. The answers to these questions constitute the pre-requisites for successful manpower planning. These ques-

tions are : Is there a net-work of well-graded and well-coordinated machinery in India at different levels and in different fields of manpower-utilisation which make, from time to time, forecasts, however crude they may be, of the manpower needs in the light of the on-going and planned developmental programmes ? Are universities associated at all with preparing estimates of manpower needs at any level ? Have the government and non-government agencies cared to make available to universities and colleges in the country the estimates of manpower needs of different categories and in different areas ? Even if the estimates of manpower needs can be made available to the universities and colleges, how is it going to be possible for the Central Government, the Planning Commission and the State Governments to decide precisely the quota of each university and each college regarding the number of places in a variety of training and instructional courses, in the present political and sociological climate in the country ? If States cannot agree on boundaries and the sharing of river waters, will they readily agree on places in engineering, technical and medical colleges ?

The mobility of population in India is quite low. The mobility of university products is equally poor. Unless economic circumstances force a young graduate of one State to seek employment in a distant other State, he will not like to migrate from his home town or even his home district. Mobility of educated unmarried women is still poorer. Under these circumstances, how is the distribution of places in key types of institutions of higher training spread over the country to be decided ? It is a fact that certain regions of the country have an excess of certain categories of trained high level manpower, such as engineers and doctors, whereas other parts of the country suffer from a shortage of trained technical manpower. Is it sociologically and politically possible to regulate and control regional imbalances in the demands and supply of trained manpower when States, by and large and departmental heads, within a State function under the effect of several considerations such as family relationships, caste, language, province, religion and political ideology.

DIFFICULT TO IMPLEMENT

Even if the planning of manpower development becomes possible for colleges and universities, its implementation in terms of regulating admissions to students is going to pose serious

difficulties. The reasons are :- college admissions cannot be regulated unless those who are refused entry are provided with alternative openings in the form of vocational training or employment. College education and university degrees are considered essential for entering certain professions and obtaining good incomes. A great disparity persists between the earning in the sub-professional and professional groups and the opportunities for promotion from the sub-professional level to the professional are still narrow. The salary structure in India does not motivate young men and women to take up skilled manual work. The basic requirement for all sorts of jobs, which before Independence, was matriculation has now risen and become university graduation. And, on the top of it, a university degree has considerable social prestige. It is difficult for universities and colleges to control such factors. It is, therefore, not practical to expect them in the present educational, economic and social state, to participate in manpower planning either at the formulation or the implementation stage.

Participation of universities and colleges in the manpower planning is a difficult task.

MANPOWER PLANNING AND UNEMPLOYMENT AMONG UNIVERSITY GRADUATES

Among the many complex and intricate problems regarding reorganisation of Indian education, a major and crucial problem is that of growing unemployment among university graduates. At the end of the Third Five Year Plan, the size of the educated unemployed was estimated at 1.5 million. This figure included qualified graduates in engineering and technology. (The size of educated unemployed is likely to increase to 1.7 million by 1970). Of these, 40 per cent are graduates in Arts, 17.5 per cent in Science, 8.2 per cent in Commerce, 7.2 per cent in the rest are post-graduates in these subjects or graduates of professional subjects.

It is a bad system which leaves thousands of young men and women unqualified or over-qualified for a job and keep them unemployed. It is said that in some advanced countries like the U. S. S. R. every graduate is given, along with his degree or diploma, an offer of a job as well. The recent cry raised by graduates of some universities at the convocations that they be given jobs, rather than mere degrees, echoes, in a way, a demand for creating this ideal situation. But the task is not easy. Unless the output of university graduates is closely linked with employment opportunities or manpower needs, no State can guarantee employment to the graduating students. The Education Commission has, therefore, rightly advocated gearing the enrolments in the universities and colleges to the planned manpower needs of the country.

FACTORS RESPONSIBLE FOR UNEMPLOYMENT

Though manpower planning seems to be an ideal solution for meeting effectively the problem of the educated unemployed, there are certain real difficulties involved in focusing the solution only on manpower planning. A number of factors are responsible

for the growing unemployment among university graduates, the slow growth of the Indian economy being the most crucial single factor. The annual rate of increase of per capita national income in India is only 1.5 per cent whereas it is 2.2 per cent in most of the developing countries. In Taiwan, South Korea and Mexico, it is 3 per cent or even more than that. Again, whatever little economic development has taken place during the last two decades, the bulk of it is in the urban areas. Big cities have begun to have a variety of jobs coming up which provide employment prospects for university graduates including women. But the rate of economic development in rural areas being slow, there are not enough jobs even for half of the cohort of graduates from the countryside. The proportion of students in universities and colleges from urban areas is about 64. It was about 82 about two decades back. A recent study has shown that in technical and professional institutions, 42 per cent of students are from rural areas and 50.5 per cent are from the low income group of less than Rs. 150 per month. Also the increasing population upsets the gains of the growing economy in a developing country and continues to aggravate the problem of both the educated and uneducated unemployment. This is true for urban areas but is more so in rural areas where the growth of economy is very slow and halting—or insignificant.

There are other factors, equally crucial, which are responsible for the growing unemployment among university graduates. The foremost among these is the poor quality of training being imparted in the university departments and affiliated colleges. It is predominantly information loaded, and is imparted in a manner that leaves most of the students intellectually unstimulated. Students are mostly passive receivers of the so-called knowledge which they scribble down hurriedly and cram without much efforts to understand and digest it. This happens in the case of 90 out of every 100 student. Very little skills are developed, consciously or unconsciously, in the student. The university graduate, trained in this way has hardly any initiative or competence to do jobs that may or may not be in his 'line'.

There is too much over loading of university students in Arts, Science and Commerce courses at present. In 1968 the enrolment in the Faculties of Arts and Commerce accounted for 51.3 per cent of the total university enrolment and if enrolment in the Faculty of Science is added to it, the percentage was as high as 74.7. The employment prospects for Arts graduates are the lowest and yet

41.4 per cent of the total university student enrolment were in Arts courses. The employment prospects for commerce graduates were better before 10 to 15 years. They are not so good now, because of slow growth of Indian economy. Still one out of every ten university students is in the Commerce discipline. The Education Commission has, therefore, rightly advocated a reduction in the average annual rate of expansion in the enrolments in Arts, Science and Commerce from the present 9.0 per cent to 5.3 per cent during the next twenty years. A country like West Germany or Japan has not only been able to solve the problem of the educated unemployed but also has been able to develop their economy at a fast rate after being torn to pieces in the last war, because they have been able to provide vocational education at the secondary and higher secondary level to 60 to 70 per cent of the total high school enrolment.

The development of vocational education in the country has been again very slow and inadequate. There has been practically no serious effort made so far to achieve a balance between general education and vocational education. The inadequate number of vocational and craft higher schools to prepare for sub-professional level of occupations is also a crucial factor which is instrumental for increasing pressure on colleges for admission and thereby indirectly contributing to unemployment among university graduates. Lastly it is the unhappy salary structure in India which does not favour the skilled manual work vis-a-vis the clerical and white collar jobs. The earning disparity between the sub-professional and professional occupations ought to be narrowed down and the opportunities of being promoted from the sub-professional level to the professional level should be widened. It should be worthwhile to point out that of the total 188.68 lakh workers in agriculture, mining, manufacturing, construction, trade and commerce, transport and communication and services only 1.7 per cent were matriculates.

LIMITING UNIVERSITY NUMBERS

As an effective step to curtail unemployment among university graduates, it is suggested by experts that the provision of facilities for higher education should be planned so that it is in proportion to the country's requirement for high level manpower. Conceptually and in principle the planning of university enrolment on the basis of planned manpower needs is good and desirable. There are no two opinions about that. But the vital issue is, is it really possible

in the present state of expansion of elementary and secondary education and with the present political, sociological, economic and other influences operating very strongly on colleges and universities, to lay down criteria for the admission of students and adhering to them strictly? Obviously not. The universities and colleges in India will find it extremely difficult, however desirable it may be, to follow a policy of selective admission. As Dr. Ghosh had put this issue in the First Conference of the Vice-Chancellors of the Indian Universities.

The responsibility for keeping these students who are a menace to the development of higher education rests squarely with government and leaders of the country, for they enter the university because they have nothing else to do and furthermore the society is imbued with the older theory and tradition of liberal education according to which a university degree gave social status to its holder.

University education has continued to act as a lever to many from the socially and economically backward communities who remained, for decades, deprived of the benefits of higher education. A university degree has tremendous attraction to them because it means a key to a more respectful life and better living standards. Similarly many girls join the college despite inadequate mental abilities and aptitude to profit by higher education because their parents believe that after graduation there would be better chances of their daughters getting suitably married. It is obvious that alternate vocational training and better job prospects for matriculates would help the situation considerably. And this responsibility lies squarely on the government but unfortunately, the Centre as well as the States in India do not have a firm policy in developing vocational education at the high school and higher secondary stages. The reason is perhaps the unwillingness of the Planning Commission, Parliament and State Legislatures to invest fairly good sum in developing vocational education. The lukewarm attitude of both the Centre and the State Governments to the implementation of the work experience as suggested by the Education Commission is an illustration of Government's indifferent policy to the development of vocational education. Further, the uncertain and unhappy policy of some of the State Governments to the development of job potentialities in high school graduates is evident from the absence of any direct and firm provision of grants in their revised grant-in-aid structures to schools of several States to enable them to provide workshops, etc., to facilitate the organisation of work-experience and the way in which some State

Governments are now trying to dilute the very idea of work-experience by equating it with craft work and social services. Thus it will not be possible to limit numbers, in colleges and universities, because the Centre as well as State Governments do not seem to be of a firm mind to develop vocational education at the high school and higher secondary stages.

There are certain inherent difficulties in Indian situation to limit enrolment in institutions of higher education. In India, the bulk of colleges are affiliated institutions. In 1967, the percentage of affiliated colleges to the total number of colleges was as high as 93.9. The trend is towards expansion of affiliated colleges. Between 1961 and 1967, the number of affiliated colleges increased by 745 from 1223 to 1968 as against an increase of 59 in the case of university colleges (from 107 in 1961 to 166 in 1967) and of 182 in the case of government colleges (from 433 in 1961 to 615 in 1967). A variety of influences operate making it difficult to regulate the working of affiliated and constituent colleges, especially in restricting admission in proportion to manpower requirement and the provision of quality education in general. The following are some of the stronger of the operating influences :

- (i) Political pressure is exercised directly or indirectly by the Members of the State Legislature or of the Parliament who belong to places where colleges are located. They have, in turn, to be responsive to the demands from the local and neighbouring communities to provide places to local students.
- (ii) Private managements often seek to open new colleges so that they can get representation on university bodies like the Academic Council and the Senate through their Heads. In this way, a group of private managements is able to create their own power blocks in the Academic Council and the Senate—the two of the three important university bodies which have a say in determining the opening of new colleges and restricting the strength of the intake in colleges. They exercise pressure both from within and without to dilute university criteria for affiliating colleges and eventually affect adversely the quality of university standards.
- (iii) Even managements of affiliated and constituent colleges often find it difficult to resist pressure for admitting more

students when the local students find it difficult to secure admission in colleges elsewhere and the local public bodies press the management to satisfy the local demand.

The policy of restricting enrolment (e.g. preventing disproportionate enrolments in arts courses) is likely to have only marginal impact on the overall unemployment problem in view of the fact that unemployment among the scientific and technical graduates is also widespread. However, considerable improvement in the quality of education in all fields is likely to alleviate the problem of unemployment indirectly by improving the growth of the economy.

DEVELOPMENT OF UNIVERSITIES

Along with high level manpower planning, Indian universities should draw up long-term plans (5-10 years) for future expansion and development. But unfortunately, it is not possible to draw up such plans. The reasons are : (i) lack of precise information on the manpower needs in different employment complexes; (ii) inadequate development of vocational education especially at the higher secondary stage (Std. XI and XII); (iii) university education still continues to act as a social lever to uplift many communities which for decades remained socially, culturally, and economically backward; (iv) there are at present few alternate employment choices available to those who will be denied admission to colleges, and unless we are able to offer adequate employment prospects to matriculates, in a reasonable measure, we cannot bar them from entering the colleges and thereby having a fair chance to improve their employment prospect through earning a degree.

UNIVERSITIES AND MANPOWER PLANNING

Since universities, including colleges, are the major agencies for manpower development, it is being maintained that their association with manpower planning, both at the Central and the State levels, is of crucial importance. In this respect, Dr. Theodore L. Rellen of the University of California, Berkley, in a study, has raised two pertinent questions, viz., (i) To what extent are the universities associated with the process of manpower planning in the country, and (ii) how can a more close association between manpower planning agencies and the universities be brought about. To my mind, the very idea of association of universities with manpower planning is immature at the present stage. It has still

remained an ideal and has not yet found a place in educational planning in India. The manpower planning in India has been largely the exercise of the Central and State Governments based on the estimates of manpower needs prepared by the Institute of Applied Manpower Research, the Planning Unit of the Indian Statistical Unit and the Perspective Planning Division of the Planning Commission of Government of India. Whatever association the universities have with the manpower planning is indirect and negligible.

Before universities in India have a fair chance of being associated with manpower planning in the country, it will be first necessary to meet certain pre-requisites. They are : (i) Appropriate Acts of Parliament and State Legislatures should be first enacted to place manpower planned development and reform of higher education on a statutory basis; (ii) There should be an agreed all India policy on manpower planned development and the planned expansion and development of higher education; (iii) Manpower planning requires reasonably accurate information about the present status of the employed in terms of occupational and industrial classification, levels of training and inter-connection between these different levels. In order that these data are available in a good measure, a cell for manpower planning should be established in every State as well as in the private sector, the task of which would be to make forecasts, however crude they may be, of the additional personnel they would require in relation to the development programmes they have; (iv) The forecasts of the manpower needs in different areas in reference to a particular State should then be placed before the Council of Vice Chancellors of all the universities of every State, who would be helped by selected professors in major disciplines of their universities to decide upon the plans of expansions and developments in the State universities in general and in individual universities in particular.

COORDINATION IN HIGHER EDUCATION

Planning and financing of higher education in India are at present done by numerous agencies, such as the Ministry of Food and Agriculture, University Grants Commission, All-India Councils of Technical and Medical Education, State Governments, etc. If manpower planning at the high level is at all to be attempted through universities, it would be necessary to ensure effective coordination of the activities and resources of these agencies with a firm focus on alleviating unemployment among university graduates through

agreed manpower estimates in different fields. But before this can be expected to be reasonably possible, the manpower planned development and the reform in higher education should be placed, as stated earlier, on a statutory basis through an act of Parliament and of State Legislatures. An all-India policy in manpower development should also be framed. Once the targets for manpower training in different areas are decided upon through the joint deliberations of the Government of India and the State Governments, the question of adequate allocation of funds to various programmes would gain a focus. There should be a committee consisting of representatives of different ministries like Ministry of Food and Agriculture, All-India Councils of Technical and Medical Education, University Grants Commission, Ministry of Education and of Planning Division of Planning Commission with either Deputy Chairman of the Planning Commission or the Secretary to Ministry of Education as the Chairman. They should meet, determine the size of allocations for different programmes and set up procedures for best coordination.

CONCLUSION

Though it is very desirable and essential that the future expansion and development of higher education in India should be according to planned manpower needs of the country, there are major political, sociological, economic and even educational influences operating at present which would make restricting the unplanned flow of students to universities and colleges very difficult. Limiting numbers in the universities is going to remain mostly a fond dream and aspiration for the next several years unless the government acts in a firm way and acts soon to develop vocational education at the high school and higher secondary stage and create alternative job opportunities for the matriculates. The responsibility for keeping the bulk of the present university enrolment lies squarely with the government. The universities cannot shut their doors to the surging crowd of students because of sociological and political reasons. However, they can contribute their mite to the solution of the problem of unemployment among its own graduates. The following suggestions should prove useful in this context :

For the purpose of alleviating unemployment among graduates, it will be necessary to retrain or impart additional training to some of them at least, so that they are fit for utilisation in the

nation's developmental projects. The universities will need to organise training programmes through correspondence courses, evening colleges inservice training programmes, night schools for industrial workers, etc. The universities can set up counselling and guidance bureaus at their headquarters and for a group of neighbouring affiliated colleges so that students get proper advice and direction in choosing courses of studies from the point of their abilities and aptitudes and also in the perspective of employment markets.

All universities and bigger colleges can also establish employment exchange bureaus to help students in their placement.

It will not be enough for universities and big colleges to set up employment bureaus and to work towards the placement of their graduates. It would also be necessary for them to set up a machinery which can do some preliminary screening of the cases of individual graduates before their names are transmitted to the prospective employers. It would be helpful to the candidate as well as to the employer if the latter is supplied, along with the name of the graduate, such information about the candidate that would be useful to him (the employer) in considering the suitability of the candidate for employment.

At present, employment bureaus that some universities have been able to set up do not have advisory committees of employers, university teachers and students' unions. Where there are such advisory committees, they exist, more or less, in name. The problem of alleviating unemployment among university graduates will be difficult, unless these advisory committees are made dynamic and effective communication is established between employment bureaus and university authorities and the prospective employers of university graduates.

As Dr. V.K.R.V. Rao has observed, "the problems of employment market analysis, vocational guidance, knowledge of vacancies and efficiency of placement are all matters that cannot be dealt with in isolation by one university employment bureau or another. If these are to be tackled successfully, there must be established some all-India organisation which would bring all these university employment bureaus together for the purpose not only of exchange of information and experience but also of research and guidance".

“ WE WANT JOBS, NOT DEGREES ”

VIOLATION OF SANCTITY

A new manifestation of the frustration of the youth in our universities has been recently in evidence. A new cry has been raised at the Convocations of some universities by the young graduates about to be awarded university degrees and diplomas. The cry is : WE WANT JOBS, NOT DEGREES. It is unfortunate that this cry is raised when the guest invited to deliver the Convocation Address is addressing them. This happened when a person of no less eminence and prestige than Dr. D. S. Kothari, Chairman of the University Grants Commission, was delivering his Convocation Address at the Indore University and when the great teacher-poet of Gujarat, Professor Umashankar Joshi was addressing the new graduates of the Bangalore University. The incidents were unfortunate, not because they constituted an act of outrage to two of our best men in the country who were teachers and not politicians or government officers. The cries raised were unfortunate because they were uttered at a wrong place, at a wrong time and before persons who had nothing to do with giving or not giving jobs to university degree holders.

In a country like India, there has been a long established tradition of regarding education as an act of worship, looking upon an educational institution as a sacred abode of the goddess Saraswati and considering a Convocation as a place for the students to receive the grace and blessings of their preceptors in all humility and with decorum and to take the sacred pledge to strive to be worthy of the honour—the degree awarded to them. Some political parties or political minded persons may or may not have inspired this cry in the students. But it is tragic that such acts of indiscretion and sacrilege should have happened. Before such profane acts, arising out of utter misconception of the role

of universities and a lack of understanding of the role of university convocations and convocation addresses, spread to other universities, the student community should be helped to see reason and behave in a matured way honouring the cultural traditions of their great fore-fathers.

NOT UNREASONABLE

This is not to state that the students' demands for employment are unreasonable. In fact, they are most natural and reasonable. If a student after pursuing learning for full 15 years of his precious early life, desires employment at the end of the successful completion of his educational career to be able to maintain himself and his family, it is absolutely reasonable. But this is something which he can validly expect of his government rather than a university, and providing employment to its citizens according to their education, ability and aptitude is one of the major responsibilities of the national and the state governments.

NOT UNIVERSITY FUNCTION

But giving or assuring jobs to its graduates is not the function of a university. The student community should realise this fact. A university, at the best, can help its graduates in placement through its Bureau of Employment Exchange, and it is reasonable for students to desire that their university should have such placement services. A university can also help its students in selecting courses of studies according to their mental abilities, aptitudes and interests through their University Counselling Centres. It is also reasonable for students to expect that their universities and colleges establish student counselling and guidance services. A university can thus advise a student in choosing the right type of courses, provide him vocational guidance, and even help him in job placement. But to ask a university to provide the job is not to understand the functions of a university.

ENROLMENT RESTRICTION

The new slogan of 'Give Us Jobs, Not Degrees' should awake the Senators and Syndics of the Indian Universities to the danger of pursuing the 'open door' policy in enrolment. Every year, new colleges are allowed to be established by universities indiscriminately. The Academic Councils, Senates and Syndicates are yielding to external pressure. There is no doubt that more colleges mean more students. The enrolment in the Indian universities has been unreasonably high in Humanities, Social Sciences, and Commerce

disciplines. The enrolment in the under-graduate classes of the Faculties of Arts, Science and Commerce which was 1.91 lakhs in 1950-51 had risen to 7.59 lakhs in 1965-66. Between 1951 and 1961, the percentage of transfer from high school stage to the first year of the university stage was 45.9 in the case of men and 44.2 in the case of women. There is reason to believe that the proportion of this transfer from school stage to the university stage has been on an increase in the last seven years. It is feared that unless the mounting enrolment in our colleges and universities is not effectively controlled, the transfer cohort is likely to swell to 60 per cent. This would aggravate the problem for educated youths to find employment. It will harm the students, universities and the society.

If University Academic Councils, Senates and Syndicates really want to place an effective check on the ugly movements of student unrest such as 'GIVE US JOBS, NOT DEGREES', they should show courage and limit college admissions to those students who possess ability and aptitude to profit by higher education. Of course, this is very difficult. But it has to be done at the institutional level. And at the state level the planning of future expansion of higher education in all states, in all the universities and colleges should be on the basis of planned man-power needs of the country as far as possible.

RESEARCH NEEDED

It is being increasingly clear that the community of university students is dissatisfied with both the nature of higher education imparted to them and the manner in which it is done. Judgments of university administrators, teachers and government, however, well founded, discerning and valid they may be, are, at the best, the subjective wisdom of a small number of individuals. They reflect the perceptions of the adults. It is necessary to know exactly and objectively what the youths in the Indian universities think, feel and desire in their education. There is a strong case for a national survey to be done by some research agency in the country of the perceptions of the student community on what is going on in the classrooms of our colleges and universities and thereby to identify particularly those areas which frustrate and irritate students. Even a National Commission to study what the students feel and desire in their higher education should help. That would be perhaps the most democratic way to go to the depth of the frequent current outbreaks of student unrest.

AREA 4: UNIVERSITY AND COLLEGE TEACHERS

If the teacher has to be rehabilitated so that he may perform his duties satisfactorily, the lost respect for the teacher has to be restored through the united efforts of the government and these new leaders. It will not do to say that the teacher must first deserve it here; we cannot say which process must come first. What we can emphatically assert is that if the university is to function properly, it has to depend upon the teacher vividly aware of his mission. In the words of the Radhakrishnan Commission, 'The factors which are responsible for the demoralization and disintegration of the teacher must be first removed and a healthy atmosphere restored for the teacher is the cornerstone of the arch of education; he is no less, if not more, important than books and curricula, building and equipment administration and the rest.'

—Professor N. K. Sidhanta

ENSURING BETTER TEACHERS FOR COLLEGES AND UNIVERSITIES

In any educational programme at any level, the teacher constitutes the most crucial single factor. This fact has been admitted by all students, parents, administrators and the society alike. The various expert committees and commissions appointed to determine the directions of change and to formulate plans of educational reconstruction in India have recognised the crucial place of the teacher and the role he can and should be helped to play in making their plans successful. Their perception of the teacher and faith in him in the remaking of Indian education is expressed in the terms they have used for him such as 'the key person', 'the main architect', 'the creator of ethos', 'the gardener of human plants', 'the builder of the new generation', etc.

In this perspective, the teacher becomes an equally—nay even more—important component of an educational programme than a good site, a fine building, adequate and spacious classrooms, effective equipments and tools of teaching and learning. And yet the unhappy fact is that enough care, time, energy and money are not devoted to recruiting the right type and number of teachers, providing them stimulating conditions of service and work, keeping high their spirit and morale and helping them grow professionally on their job.

There is considerable dissatisfaction in the society about the teaching staff of colleges and universities, and teachers, too, on their part have dissatisfaction about their status, economic conditions, load of work, service conditions and the welfare services provided for their benefit. The gap between the expectations of the society from the teaching staff and what is being actually offered by the teachers to the society on the one hand, and the expectations of the teachers from the society and what is actually meted out to

them is widening. It is crucial for both the parties to make earnest efforts to reduce the annoying gap. The goal should be to secure better teachers. And better teachers mean better students and a better society.

TEACHERS BEFORE AND NOW

A criticism that one frequently hears these days is that we do not get good teachers to staff our universities and colleges. The good days of the yore when universities and colleges used to have on their staff great scholars—intellectual giants—who were devoted to their work in the classrooms and outside, who had high professional sense and integrity, who commanded respect from the society by their love for teaching, for their competence, for their missionary zeal and dedication seem to be over. That academic and professional depth of intellect and character which were the order of the day in the past are seen these days only in a small number of teachers of our universities and colleges. The quality of the teaching staff that we get and recruit has perceptibly gone down. There are no two opinions about that. But why is that so?

DETERIORATING QUALITY OF UNIVERSITY PRODUCTS

The main reason seems to lie in the fact that the quality of our inputs and outputs at the graduate and the post graduate levels, has gone down by and large. A first class at the first degree or the second class degree is not, in all cases, a guarantee that the possessor of it has real mastery in the subject field in which the degree is awarded. Our standards of assessment and evaluation have become less exacting than in the past. With the coming of many universities and colleges in every State, the former keen competitions among colleges spread over large areas having a larger honours list have almost gone. The efforts made by them to maintain their instruction, training and research at high level have become weak and the awards of high classes and distinctions have become less exacting and scrupulous. A high degree does not mean deep scholarship. If there is at all any competition among universities and among colleges, it is at the wrong end—giving more first classes and distinctions. And it is from such products of our universities and colleges that we mostly get the bulk of our junior teachers. It is no wonder, therefore, that their high academic qualifications are no indications of their great

learning and that they do not provide any guarantee about their mastery over the subjects for the teaching of which they are recruited. This is true in large many cases. It is true that universities have laid down minimum academic and professional qualifications for recruiting the teaching staff of different categories for affiliated colleges and in their departments. But that has not really helped much. On paper these qualifications are met by several candidates who apply for the teaching positions and the best of them are appointed. But one does not know how far the 'best' is really 'good', if not 'the best'. In many cases the so-called 'best' are no good to teach even the beginning classes.

DEFECTIVE RECRUITMENT

The recruitment and selection of teachers of higher education are mainly defective. There are four main drawbacks. The first is regarding the inbreeding by institutions practised through the recruitment of their own products. The posts of teachers, whenever they fall vacant or are newly created, are no doubt advertised in some widely circulated newspapers at the State level and the national level as well. In the cases of posts in university departments, copies of such advertisements are sent by some of the universities at least to almost all universities in the country for favour of bringing them to the notice of the teachers of their relevant departments. The idea is that talented teachers can be procured if recruited from all over the country. But this does not work. The number of applicants from other universities is usually small. Only a few applications from distant universities are received. The probable reason is that enough confidence does not prevail among teachers in other universities that the selection will be on merits only and not on linguistic, regional or some such extraneous considerations.

This apprehension has also its root in the present tendency among many Heads of universities and colleges to recruit their own students to man their teaching staff. This is what is called inbreeding. It proves harmful, because the recruited teachers who were only recently the students of the institution cannot contribute much. They suffer from the halo effects of their own teachers. They can hardly take any independent stand on methods of teaching and testing from the one taken by their superior who was their own teacher. They adopt a line of least resistance by toting the line of their seniors.

Again, they cannot give any thing new or better and more to their students than what they themselves learnt in the college or the department. American universities have always preferred cross fertilization in the recruitment of their teachers. They prefer engaging teachers who are the products of other universities to their own products as the former can bring to bear upon their work new ideas and approaches. This proves eventually contributive to the raising of the quality of curriculum, teaching and evaluation. Indian universities and colleges should follow the policy of cross fertilization followed in American and British Universities in the recruitment of their staff. The cross fertilization of the teaching staff is the first vital step towards the recruitment of better teachers for our institutions of higher learning.

The second drawback stems from the natural human weakness often found in those who sit on the Staff Selection Committees. They, at least some of them, who are vocal, tend to succumb to extrinsic pressures—communal, linguistic, political and local. And the result is that selection of good teachers becomes a chance affair. This may not be the case always. But that this does happen is significant.

The third drawback lies in the very tools, method and process of selection of teachers. It is almost impossible to evaluate the worth of a candidate for the teaching work through an interview conducted by a few experts, away from the actual scene of teaching, and that, too, in a short span of half an hour or so. Very seldom efforts are made to get the elaborate and comprehensive records of the candidates' achievement in all the examinations they had taken at school and college, to get the evidences of their interest, aptitude, and actual work in co-curricular fields and with students and the community; and to procure all possible write-ups and references which can throw meaningful light on their attitudes to teaching, students, institutions and community. Where some of these records are called forth, very little or no weightage is given to them in the final decision-making, i. e. the choice of the candidates. These records are usually glanced through hurriedly, in a vague manner, and on an overall basis, by selectors. One is not always sure whether these records had any bearing or share on the final judgment.

The fourth drawback lies in using the sole medium of advertisement in staff recruitment. In American universities and colleges, the Head of the department where a new teacher is to be recruited

undertakes a nation-wide quest for identifying the suitable candidate. This he does through personal contacts, through writing to different universities, through inviting suggestions from students, and so on. Suitable candidates who are found out through this survey and screening process are then invited to present themselves in the department where other senior teachers of the department meet them, talk to them and evaluate them. The final recommendation on the recruitment of the candidate is made on an evaluation done on a joint and over-all basis. In India, administrators will not perhaps agree to give this kind of and to this extent freedom to the Head of a department or an institution. A fear is always entertained that this freedom will not be honestly used; there will be favouritism and nepotism. This apprehension is not altogether ill-founded. It may happen that the final recommendations of the Head may not strictly be on merit. However, there is a need to trust the integrity of a Head and his senior colleagues. They should be given a real opportunity to do the preliminary survey, the quest and the scrutiny. They would thus be able to collect a comprehensive data about each of the candidates that they would like to recommend to the Staff Selection Committee which would make the final selection based on these data and their own judgment. In order that this kind of recruitment procedures can be adopted in our colleges and universities, it is essential that decisions to fill out a vacant or a new post be taken by administrators as early as possible, at least so early that the Head of an institution or a department at least gets a minimum period of three to six months for his quest and scrutiny.

The Kothari Commission also has made a similar recommendation in this respect. Of course the recommendation was regarding the recruitment of the staff for the major universities that they have recommended. But the recommendation is good for all colleges and universities. The recommendation is worth quoting. "Each department or faculty should have a specially appointed personal advisory committee, which would work in close collaboration with the appointing authorities of the university, to find faculty members in fields in which it is already distinguished or in which it seeks distinction. It should have, as a major responsibility, the search for the most outstanding and promising Ph. D.s, M. A.s and M. Sc.s. and even brilliant recent graduates. The great merit of such committees lies in their informality and freedom from rigid procedures and this should be fully ensured. They should scrutinise

the lists of Indians abroad and the candidates available within the country and the search for staff, instead of being limited to the State or the region, should be made nation-wide and, in a sense, worldwide. They should actively seek such candidates for appointments and wherever necessary, offer them advance increments. What is even more important, they should be assured of research opportunities, opportunities for study leave and the possibility of achieving professional excellence. There should be room for flexibility in the appointments and promotions". (Report, p. 282)

LACK OF FACILITIES FOR FIRST-RATE POST-GRADUATE EDUCATION

There are other hurdles and deficiencies which come in the way of procuring good teachers for our colleges. One such deficiency is the lack of facilities for the first rate post-graduate education within our country. This deficiency is pitiable and frustrating. It is largely responsible for the alarming brain-drain from which our post-graduate departments suffer. This brain-drain is both of the enrolment of talented students and their staffing by able and outstanding teachers. When colleges and universities get average and mediocre teachers, it becomes difficult to expect a good flow of able graduates, advanced students and researchers.

The Kothari Education Commission has correctly diagnosed this malady. It has made the novel proposal on the establishment of a few major universities which can serve as the nurseries and training centres within the country. The Commission claims several advantages for this proposal, but one of the most crucial advantages pertains to the improvement of the supply and quality of the personnel needed for the staff of universities, colleges and research centres. The possibility that the major universities will be able to supply able and outstanding students for recruitment as teachers in colleges and universities was envisaged by the Commission too. And the result would have been as expected. But it was rather unfortunate that the proposal of the Commission on major universities was opposed by the Vice Chancellors of some of the universities out of a fear and jealousy that their own universities will not get the benefit of promotion into major universities. Thus, a great opportunity for preparing better teachers for colleges and universities was allowed to slip away and thus wasted.

education. They should help in building up a corporate life in institutions of higher learning. As observed by the U.G.C. Committee on residential accommodations for teachers and students, "If residential accommodations for teachers are made near libraries or laboratories, it will be a great boon not only for teachers, but also for the students as well".

The Commission has also initiated a novel scheme, under which eminent retired teachers are enabled to continue their teaching and research work on an honorarium of Rs. 6000 per annum with an additional annual grant of Rs. 1000 to the work undertaken by them.

There are also travel grants to enable teachers of universities and affiliated colleges of research or advanced study in the country. The point that is being emphasised here is that emoluments and conditions of work of college teachers have improved considerably in recent years. This should help in recruiting better staff in colleges and universities and to retain them.

Teachers in universities have also a good security of service. Teachers in private colleges may not be so well placed; but even there a teacher who is good at his work, who has a good professional sense and spirit, who takes healthy interest in students, who contributes to the general welfare of the community is hardly placed at any time in a precarious position of losing his job. Only the plotting, the agitating, the politician-types of teachers who shirk their work and disturb the peace and harmony of the college campus come to grief.

It is true that in certain metropolitan centres, college teachers are not given the salary for which they sign on the pay roll and their services are terminated for no fault of their own. But such instances are far and few between. This is due to some bad managements. Some black sheep are bound to be there in all managements, whether they be educational, industrial or business. They are exceptions which do not prove the rule.

It is often said that services other than teaching give more benefits and more advantages of living a comfortable life to persons of high qualifications. That is why well qualified persons do not join colleges as teachers. It is difficult to say how far and to what extent this is true. It may be true that in independent business and in certain professions, one earns higher salary or income. But it is not true if the focal point is 'service'. Teaching is undoubtedly more satisfying than any pursuit. It is more challenging if one delights in adventure. In the words of the Radhakrishnan

University Commission, "The teacher dwells in a world where he has the feeling that he belongs to it and where he has no sense of alienness. He has the opportunity which few others have of leading a life in which work is happiness. The work is congenial and he enjoys amenities which few other professions afford. During terms when his lecturing hours are not long and in the intervals of vacations, he is master of his time and movements. His daily pursuits are pleasure-giving and followed in surroundings where there should be few strains and conflicts."

CONCLUSION

With the improved salary structures and better conditions of service and of work, it should be possible to attract talented and outstanding teachers for filling the positions of teaching in colleges and universities and retaining them. Much depends on the heads of institutions and departments to build up their staff academically and professionally. All teachers, even junior-most of them, should have such a satisfying treatment and such congenial work conditions that they develop a sense of belongingness to the institution and they develop interest and confidence in themselves and in their work. The functioning of the heads in relation to their staff should be on a democratic basis. Heads should practise pleasant human relations besides providing a firm and dynamic leadership. If they learn to satisfy the four basic psychological human needs—of love, recognition, security, and adventure—in respect of their subordinates—they will be able to make their precious contributions in improving the morale of their staff. This would improve staff motivation, enhance their creativity in teaching and in allied tasks, and facilitate the re-development of the classroom and of the institution as a temple of real learning and pursuit of excellence both for students and teachers.

It is towards the attainment of such a position and the realization of such an ideal that the efforts of all those who are concerned with higher education, in one capacity or the other, be directed. When this is done, the teachers—the academic community of universities and colleges—will be able to develop their unique character as teachers by practising vigorously their academic freedom with a sense of responsibility. They would then be well-equipped to play an active and positive role in the improvement of standards, and as moulders of students and the leaders of the society.

IMPROVING UNIVERSITY TEACHERS' FOCUS AND IMAGE

One of the saddest tragedies being enacted day in and day out on the campuses of universities and colleges these days pertains to the honour and self-respect of teachers so easily attacked and so often undermined

TEACHERS BELITTLED

The teacher is the crucial factor in the programmes of colleges and universities. This is said very often. But it has become a mere platitude. The society has not yet learnt to give the respect due to its teachers, even outstanding teachers. The politicians, the executives, the government high rank officials, and the rich have received more attention, respect and consideration on occasions when they happen to be there along with college or university teachers. This is done by the very persons who happen to advocate high social status and high social recognition for teachers. When learned teachers of colleges and outstanding scholars of universities are so highly treated or ignored, what to say about high school teachers and primary teachers!

The teacher, however eminent and learned he may be, is no dignitary, and, therefore, in various kinds of social meets, either his presence is not noted at all, or a complascent nod of superficial recognition is thrown out to him, the poor fellow stands in a corner or retires to a background position. He feels so awkward in such climate of indifference and hypocrisy that he likes to slip away from the gathering at the earliest opportunity that he gets, which he often does. There is so much snobbishness in higher circles of society and even among those who head public bodies and institutions that even those teachers who are heads and shoulders above them in intellect, in scholarships, and in character are belittled or

because it is said that teachers are not honest enough to be trusted and that they are not competent enough to be able to set their own tests of examinations. Dynamic methods of teaching like seminars, workshops, guided assignments, activity methods, etc. are resisted, because they are considered impracticable in Indian situation whereas they are the order of the day in the universities and colleges of many countries of the world. Provisions like counselling and guidance and Deans of Students are opposed, because there are not enough funds to create such student welfare services. And the shocking thing in the opposition to all these things is the distressing fact that it comes from teachers.

Perhaps there cannot be any more and worse character assassination of teachers than what happens in examinations. In some universities, teachers are called in the university office to examine answer books. Teachers are asked to examine in turn particular question one, two or like that. The teacher is made to do the examination work in a situation in which he cannot communicate with others. What worse insult can be there of him of the integrity of his character, of the honesty of his purpose, and of his sense of high values? Not that malpractices in examinations are not indulged, in and external pressures are not brought to bear upon teachers to assign more marks to certain answer-papers than what they actually merit. But for the fact that there are certain malpractices prevailing in education and that there are some black sheep among teachers (they are there in every walk of life), to resort to such practices in the name of security, objectivity and fair play is nothing sort of the character assassination of the teacher-community in colleges and universities by teachers themselves. The worse happens when the system of assigning dummy numbers to answer books is followed. It becomes worst and the most disturbing and disgusting when teachers themselves advocate and ask for this system. There can be no other way of demoralising the teaching community than this. It is highly desirable that such thinking and efforts which assail the honesty and integrity of college and university teachers should stop. It is likely that trust placed may be abused by some teachers. But on that account to take measures that would demoralise the whole teacher-community and assassinate his personality and character should be stopped forthwith. The teacher-community itself should not be an instrument of hurting its own name and image, and it should not be a party to this kind of reforms of questionable value and purport.

It is being said now-a-days that college and university teachers have become trade unionists, politicians, businessmen and bureaucrats. It is true that College or University Teachers' Associations are coming into existence in a more increasing number than before. These are new experiences for leadership among teachers. It is natural that in the early period of their functioning, the Teachers' Associations carry their main struggle and fight towards improvement of the conditions of service and work for teachers. This has happened and is happening in the case of Teachers' Associations at all stages in all countries. The trade union like activities of Teachers' Associations is just an initial phase. Though it may not be a passing phase, it is certainly not its true and main phase. As time passes on, either the leadership of the Teachers' Associations itself will take over more challenging functions like those that relate to the professional growth and the inservice education of teachers, improvement of the college and university programme, development of harmonious and productive life in campus and improvement of institutional service for the welfare, and development and enrichment of the local and neighbouring communities from which they draw their students.

Among teachers, it is true that there are a few politicians. This is true not only of colleges in India, but of all over the world. This is a fact of natural development in all social and national affairs, a fact which has to be normally accepted and faced as a fact of development and change. It is the result of the growing and fast vitiating political environment in the country. It is also due to personality characteristics in the case of some individuals who happen to be university or college teachers.

It is possible that such politician-teachers may be spoiling the educational climate of a college or a university and vitiate its academic life. But the defence walls against the activities and behaviour of such persons are to be built among the teachers themselves and by streamlining and strengthening of the academic programme. The politician-teachers will meet their defeat not from college or university administrators, not from the society or from government but more from their own colleagues, their fellow-teachers themselves, if the latter can be better professionally involved and stimulated. The leadership among teachers should be strengthened. The college and university teachers who are intellectually high up cannot be dumb and indifferent, in all cases and

at all times, the followers of those who have their affiliations and roots in sheer politics and in political parties.

It is also said that teachers do private business, give private tuitions, open coaching classes under the name of fictitious or false managements and thereby they lower the dignity of their profession and work in institutions of higher learning. This is true, but again, the number of such 'professionally bad' persons is small. This happens sometimes in big cities, and especially with teachers who teach subjects like English, Mathematics and Science. The evil of tuitions and private coaching for remuneration cannot be checked easily as it has roots in economic considerations. Many attempts have been made to root out this evil at the school stage, but they have not succeeded. The evil draws its strength from both the desire and fear of parents and students pertaining to success in university examinations. This happens more in the case of students who ought not to have been admitted in colleges and universities because of their poor academic record and equipment. The remedy lies in making university and college admissions strict and selective.

It is difficult to prevent a college teacher from doing private business. Very often, this cannot be detected, and even where it is detected, it is difficult to stop a person from doing it, as there are many 'slip-windows'. So long as this kind of business does not affect the academic work of the teacher in the classroom and other work in the institution, it is not good to be bothered about it. It is only against the malpractice, such as leaking our examination questions for monetary gains, assessing examination papers in a subjective manner to give advantage to students who compensate the examiner-teacher by liberal payment of money, the indulgence in practices that are described as 'bribes', 'nepotism', 'prejudice', 'vengeance', and so on. Whereas evils among college teachers should be firmly attacked and rooted out, it would help the cause of higher education if teachers are helped to be better teachers by placing faith in their integrity and honesty, by trusting them more than what was done in the past, by involving them more in the in-service programme of professional growth, by improving communication and dialogue with them and giving them a better and more frequently a platform for talk and work.

SELECTION OF COLLEGE AND UNIVERSITY TEACHERS

The fact is, the teacher constitutes a very vital key factor in the maintenance and promotion of standards in educational institutions, and even then not much genuine care and concern usually go into the choosing of staff for schools, colleges and university departments

Though it is accepted by all who run the administration of our educational institutions that teachers should be recruited on merits and not on any other grounds very often several extraneous factors such as outside pulls, vested interests, caste and community considerations, the charm of the physical personality of candidates, etc., play a decisive part in staff selection

Industries and business have developed effective staff recruitment techniques and practices. It is an irrefutable fact that staff selection is done more educationally and scientifically by industrial and business firms than by the managements of educational institutions. There is more planning, wider search for merit and talents, deeper screening and more valid and reliable evaluation in industrial, commercial and technical recruitments

IN COLLEGES

Most of the affiliated private colleges select their teachers through *ad hoc* Staff Selection Committees. Very often the very constitution of these committees does not hold out a promise for a fair screening and valid and reliable appraisal of job competence of candidates

Hardly external experts in the subject field are invited to sit on the interview committees

Rarely detailed procedures for screening the personality, knowledge, teaching skills, research competence, morale, human

relationships and attitude to work and to the teaching profession of the candidates, are planned out beforehand. Random questioning of candidates at interviews is the sole technique and tool used in selecting teachers.

Very often the paper qualifications and personal factors constitute the sole norm and tool for selecting candidates. The readiness of the candidate to accept a low salary and pass on a higher receipt also becomes a criterion of selection in some cases.

IN UNIVERSITIES

Staff recruitment procedures and practices are decidedly much better in universities than in private colleges.

Almost all the universities in the country have statutory committees of selection for appointment of Professors and Readers. The recent move is also to have similar committees provided in the University Act itself for selecting Lecturers and Assistant Lecturers. It is maintained that, for recruiting other subordinate staff such as Research Assistants, Laboratory Assistants, etc., the individual university department should have authority as well as the responsibility.

Selection Committees for recruiting Professors and Readers have internal members and some external experts. The internal members are the Vice-Chancellor, the Pro-Vice-Chancellor or the Rector, if any, and the Head of the Department for which the recruitment is to be done. In some universities, besides the Head of the concerned Department, the Dean of the Faculty or the Director of the Institution also sits on the Selection Committee as an ex-officio member.

Four persons having special knowledge of the subject for which the Professor or Reader is to be appointed, are selected by the University Syndicate. Some University Acts also have a negative provision to the effect that half the number of these experts should not be members of that University Senate or of any Faculty or teachers of the University.

Conventions have been developed in many universities to select all the experts from outside the university.

For preparing the panel of experts, two procedures seem to be largely followed by universities, viz, the Head of the Department submits a list of experts twice as big as the number to be appointed, and the Syndicate picks up the names from the list.

In some universities, the Board of Studies or Academic Council develops a list of experts in different subjects taught in the University and the Syndicate makes its own selection from the list.

Some universities have similar procedures for constituting Selection Committees for Lecturers and Assistant Lecturers, though the number of experts in this case usually does not exceed one or two.

These Selection Committees have responsibility to screen thoroughly the merits of the various candidates and recommend the names, if any, of persons who might be considered suitable for the post, arranged in order of merit. It is usually open to each Selection Committee to recommend any one of such candidates as being in their opinion best suited for the post, or the Committee may not recommend any candidate if none of them is found by it suitable for the job advertised.

Evidently, this appears to be a fair procedure for recruiting university teachers. But it suffers from certain basic flaws

UNPSYCHOLOGICAL INTERVIEWS

Final decision is mostly taken on the performance of candidates at the interview. Very often the interview itself is unplanned, superfluous, and conducted in an unpsychological manner and climate.

Candidates who have sharp memory, who have a flair for conversation and argumentation, who have mastery over the English language, who have skills in responding in a way that is more acceptable to the members of the Committee and who have a pleasing personality usually score success at interviews. And it does not always mean that they have qualities and competence to be good Professors, Readers or Lecturers. Sometimes the experts attack the candidates verbally, ask them corner questions, assume frightful postures and attitudes, use remarks such as "don't bluff", "if you do not know tell us so", "you must be teaching wrong things", "give a research design on this" etc.

Interviewing is a psychological act. It is a kind of educational measurement and evaluation. The candidate should be placed at ease and nothing should be done or said that disturbs his mental poise or shakes his confidence. The focus in interviews should be on what the candidate knows and not on searching out his ignorance.

COMPLETE RECORDS

To give the sole or unproportionately high weightage to interviews lasting for half an hour or so is not the scientific way of selection. The candidates should be asked to submit as fuller records as possible of their qualifications, experience, evidences of professional growth, classroom teaching competence, research expertise, human relationships, professional work outside formal institutions, attitude, etc.

The Head of the Department in which the post is to be filled should have a responsibility to collect as much additional data as possible about the candidates through making suitable references in institutions where the candidates have worked previously or are currently working. The records should also have good weightage in the final selection.

If it is assumed that teachers hold a master key to the improvement of standards in educational institutions, their selection should be through techniques and procedures of comprehensive evaluation.

SYNDICATES AND APPOINTMENT

It is the Syndicate of every university that makes all the appointments of the staff. This is fair and reasonable. But a Syndicate should not over-exercise its powers.

Cases are being reported from time to time, from most of the universities to the effect that Syndicates at times turn down the recommendations of the Selection Committee if the selected candidate is not acceptable to them for one reason or the other and decide to readvertise the post.

Appointment of teachers is an academic matter. When a Syndicate decides to advertise a post, it naturally means that it has taken this decision after full consideration of the financial aspect. It is the Syndicate that appoints experts, on the full appreciation of their academic distinction and professional wisdom. When these experts select a candidate, to reject their judgment and to readvertise the post is not fair to the experts, not fair to the candidate, and it is not conducive to creating academic climate and confidence among teacher communities.

Let us do everything possible to devise effective tools and adopt scientific techniques and procedures to improve staff-selection procedures. But once the experts have done their job, the Syndicate is in honour bound to accept their recommendations.

THE WORK-LOAD OF COLLEGE AND UNIVERSITY TEACHERS

One aspect of the work of teachers of colleges and university departments, about which not much reliable and valid data are available and about which hardly true ideas and precise understanding prevail in the society, is the nature and size of their teaching and other work-load

It is commonly believed that so far as the work in the classroom is concerned, the college teacher is very happily placed in comparison to teachers working at other levels of education. It is held that whereas the teaching load of other teachers is to be thought of in terms of the load per day, in the case of college teacher it is per week. However, the load is not much less. Four out of every five college teachers have the teaching load of 15 to 20 hours per week.

It may appear that quantitatively the teaching load of the college teacher is less than that of the high school teacher and of the primary school teacher. By and large, a school teacher has to be in the classroom doing instructional work for seven out of the total eight periods per day. This may be true about the college teacher to a lesser extent. A college teacher, by and large, is also required to teach everyday in the classroom, and in the cases of Assistant Lecturers and Tutors, they have daily teaching assignments, exceeding two or three periods. Obviously, a college teacher may appear to be exposed to less rigour of daily classroom teaching than what happens in the case of a school teacher. This is because in the case of the secondary school teacher, the State Education Department has laid down that he would teach for the minimum period of 22 hours a week, and the Government for the purpose of sanctioning the maintenance grants to a school on its staff, approves the number of teachers on the basis of a block of 22 hours of teaching work per person, as shown in the school

time-table. This does not become so conspicuous in the case of college teachers, because the teaching load varies with different grades of teachers.

If the work of a college teacher is considered quantitatively as it is laid down by universities, and if it is compared with a daily or weekly load of teaching being borne by a school teacher, the truth will be out, that three-quarters of college and university teachers have teaching work for about 3 hours a day.

Universities usually lay down rules for the minimum teaching work that the different categories of their teachers and of affiliated colleges have to do. Some universities do require statements regarding the teaching load of each of the staff members, when a constituent institution of the university makes proposals for the filling out of the vacant posts or for the creation of the new ones. There are not much precise data available for all Indian universities in this respect. No study seems to have been done in this connection. However, the recent position in respect of the teaching load of university teachers at least in some universities is discussed below, on the basis of a sample of 20 per cent of the total universities in the country. This would provide a broad indication about the size of the teaching load that is generally borne by university and college teachers of different categories.

TEACHING LOAD IN INDIAN UNIVERSITIES

Most of the Indian universities have laid down precisely the quantum of minimum of lecture-work that each category of its teachers should do. Only a few of them have left it ill-defined. The work-load is laid down for all the grades of teachers, such as Assistant Lecturers (including tutors and demonstrators), Lecturers, Readers and Professors.

Some data in this respect of 14 universities were available to this author. These universities included teaching universities, affiliating universities and even central universities. They were from the North, South and West parts of the country. This was treated by him as a sample for the study of the problem. However, the conclusions drawn from the sample, being not quite representative, should be taken at the best as indicative and as broad facts.

1. Universities, either through specific rules or by frequent emphasis, lay down that a teacher in the university departments has to devote his whole time to the work in the department.

2. In most cases, the work-load is determined in terms of class instruction periods, each of 45 minutes duration. A few have laid down the work-load in terms of certain number of clock hours work.
3. Only a few universities give credit for Ph D. guidance work, equating one Ph. D. student guided with 2 periods.
4. Compulsory attendance in the building for not less than four hours daily is also specified by some universities.
5. Some universities have also rules that teachers in university departments have to devote their whole time in the service of the university.
6. Teachers of the category of the Assistant Lecturers (or Tutors or Demonstrators) are given a fairly high quantum of load. It ranges from 21 periods to 32 periods, the average comes out to be 26 periods. Some universities specify that Demonstrators shall do the correction of Journals, etc in addition. In some, the assessment of tutorial and class-work is included in the work-load. The general practice is not to count for work-load supervision on practicals. This may also apply to supervision of periodical tests and examinations.
7. The teaching load for lecturers ranges from 13 periods to 24 periods, the average being 19 periods. Some universities have specified the number of tutorials to be conducted by the lecturer (it is in the ratio of 1 tutorial : 3 lectures). Some (say, about 25 per cent) universities also distinguish between lecture work to be done in under-graduate classes and in post-graduate classes. Lecturers who are post-graduate teachers are, therefore, given 2 to 3 periods of less teaching work. Some universities also distinguish between the teaching load in Humanities and in Technology and Science, and give to lecturers in Humanities at least 3 periods of less load.
8. The work-load deemed essential for teachers of the Reader grade ranges from 14 periods a week to 16. Some universities lay down that they should ordinarily attend the Department from 12 noon to 5 P. M. in addition to lecturing work. Some also lay down as maximum 3 papers or 6 periods, plus related tutorials and a maximum number of 8 research students
9. Teachers of the grade of Professor have a work-load of periods ranging from 9 to 12 per week, the average being 10. Some universities like the Delhi University make no distinction between

a Professor and a Reader or a Lecturer so far as the work-load is concerned, it is 18 periods of 50 minutes each or 15 hours. In the Madras University the Principal of a College has a teaching load of 6 hours a week and a Head of a Department of a College has a load of 12 hours plus 4 hours of supervision.

This analysis shows that there seems to prevail a practice in the Indian universities to view the work-load of teachers mostly in terms of the teaching periods in the class-room. The other aspects of his work-load in the co-curricular field, in students-welfare services, in extension services to the community, in individual research work, in building himself professionally do not form the part of his over work-load. This is not because the significance of this kind of his work is ignored or under-estimated, but probably because it is difficult to quantify this kind of work and also because all teachers do not do this kind of work.

The analysis further throws light on the work load of the Assistant Lecturers, Tutors and Demonstrators. They are required to put in about 20 hours of work per week which comes very near to 22 hours of work per week being done by high school teachers in States like Gujarat. Out of the total 1.27 lakhs of teachers in position in Indian Universities and colleges in 1968, about 13 per cent were teachers of this grade. The average teaching-load of Lecturers is 15 hours a week. In 1968, the teachers of the grade of Lecturers constituted about 72 per cent of the total university and college teachers. Thus, if we take the categories of Assistant Lecturers and Lecturers together, it can be said broadly that 85 per cent of teachers of universities and colleges have the teaching load of 15 to 20 hours which is not appreciably small in comparison to the load of school teachers. This shows that the work load of a large number of teachers of higher education is not small as it is generally believed by the society.

TEACHERS LOAD IN PERSPECTIVE OF THEIR FUNCTIONS

These and such other data regarding the teaching load of teachers of institutions of higher education should help in exploding the myth that teachers of higher education do not have much work. The nature of work of teachers of institutions of higher education is so distinctly different that their teaching load is to be judged on the basis of the functions, task expectations, the prog-

ramme of higher education, and the over-all role of teachers which is more intricate and challenging, demanding the best that is in him than probably is the case with his colleague in the school education.

A college teacher has to develop expertise in his subject field of specialization. He has to continuously endeavour to improve, expand and deepen his scholarship. He cannot take shelter for long behind the cover of his high academic and professional qualifications. He has to be in touch with the latest developments in teaching and research in his field, and for that it is expected of him that every day he spends some time either at home or in the library for self study and thinking. This is a vital part of his work, it cannot be divorced from his teaching responsibility. It is observed that for about one hour's lecture in a classroom, a college teacher has to put in four to five hours of preliminary preparation work in terms of reading, thinking, organising thoughts, thinking of illustrations and examples, thinking of practical applications, and preparing a list of further reading for students. Unless a college teacher puts in hours of hard work on pre-thinking, planning and applications, he will not be able to leave a lasting impression on the students. Unless he gives evidence of wide reading and original thinking, he will not inspire the youth. His function is not to convey to the mass of students factual information—this can be better done through setting reading assignments—his job is to stimulate the thinking of students, help them to develop an inquiring mind and spirit, build in them a habit of exercising independent and unbiased judgment, place them in such learning situations wherein they learn to discriminate between adequate and inadequate, relevant and irrelevant data. These are no easy tasks for teachers. This requires hours to be devoted to self study. And these hours of work are implied in the teaching-load of college teachers.

It may be true that all college teachers do not indulge in such a kind of self-study and make preliminary preparation and planning. Then, they are the misfits. They do not deserve the high name of college or university teachers. The college or the university should feel sorry that it has recruited such teachers. They should try to salvage as many of them as possible through taking such measures that would increase their motivation and improve their attitudes. Such teachers are also to be pitied. We should feel sorry for them because they are intellectually and academically

dead They miss the excitement of learning and teaching The Radhakrishnan University Education Commission has said that "a teacher who is not a fellow traveller in this exciting pursuit, and who stands merely watching others, misses the thrill of adventure which is so potent a stimulus of thought".

TEACHING LOAD CANNOT BE QUANTIFIED

The demands on teachers of institutions of higher education are varied and exacting And as all of them cannot be worked out quantitatively, they cannot be precisely articulated in the concept of the teaching load When it is said that college teachers have less teaching load, the above facts of the time needed for self study, preliminary preparation and planning remain unaccounted

Unlike school teachers, university and college teachers are also expected to do some research, may it be of the nature of an action research The Radhakrishnan University Education had attached great importance to the research functions of university teachers The Commission's feeling was that a university teacher cannot escape his research commitments To quote the Commission "Research or quest for new knowledge is not merely an additional casual activity of a university teacher which he may, if he so chooses, omit at the peril of intellectual stagnation Research implies an enquiring attitude of mind In a university which is the laboratory of thought, no one is fitted to work whose mind has ceased to wonder and whose intellect has stopped from questioning"

When the university teacher is given a smaller load of teaching work in comparison to what normally is the case with the school teacher, this research function and quest tasks are implied though not explicitly stated The self study and research obligations are so crucial that even junior teachers in colleges should not be loaded with much teaching work in the classroom

GRADES OF TEACHERS AND TEACHING LOAD

Indian universities usually have four grades of teachers called Professors, Readers, Lecturers, and Assistant Lecturers or Tutors or Demonstrators Affiliated colleges have Senior Teachers or Professors, Lecturers and Tutors or Demonstrators, but not Readers As Professors or Readers are heads of university institutions or departments, the Senior Lecturers or Professors are college principals and heads of departments These grades indicate the demarcation of duties and responsibilities, and, therefore, varying

degree of the teaching load. The four categories of university teachers—Professors, Readers, Lecturers and Assistant Lecturers—not only signify varying levels of maturity and experience but of scholarships, research and post-graduate teaching tasks. In Government departments there obtains such a service system where a person very often, if not always, rises to a higher grade or category through sheer flux of time. This is not the case in universities and colleges. Mere seniority is hardly the ground for promotion. Usually promotions in universities from Lecturership to Readership and from Readership to Professorship is to be earned and each advance in rank of a teacher should be based on the evaluation of the individual's achievement.

These four grades of university teachers involve difference in salary structures and nature of work. The higher grades of Professors and Readers are involved not only with more exacting work and in large and complex responsibilities but they have more creative and challenging work. These categories of teachers have to put in many hours of creative type of work in academic and institutional planning, post-graduate teaching and research. And, therefore, they have less hours of teaching work. That is quite rational and academically sound.

SMALLER TEACHER-STUDENT RATIO

The high grade quality of teaching work and research guidance work that teachers of institutions of higher learning have to do is also reflected in the smaller teacher-student ratio provided in their case. In 1967-68, the staff-student ratio in universities was about 1:15 and in affiliated colleges 1:23. The ideal teacher-student ratio in a developing country like India is placed at 1:15 at the undergraduate stage and 1:10 at the post-graduate stage. If viewed in this perspective, it must be said that teachers in universities, especially in affiliated colleges, have more teaching load than what it should be normal for college teachers.

There is another crucial fact about the teaching load of teachers at the stage of higher education. The teaching load has also a vital relation with the nature of work being done in a faculty or an institution and its programme. For instance, the teaching load in an Arts College and Commerce College cannot be calculated on the same basis as in a Law College. Similarly, no such comparison can be made in respect of the teaching load between institutions where classroom lectures are mostly the order of the day, and

where laboratory work and workshop work form a large component of daily schedule of teachers. In Colleges of Education and Social Work, considerable work is being done by way of practical work outside the premises of the college, in schools and in social work agencies. They cannot be considered on the same basis as the teaching load in an Arts College. Similarly, within the same institution the teaching load would vary between different departments because of the nature of teaching, research and training work undertaken by them. It is, therefore, necessary that if norms for teaching load are to be developed for teachers of higher education, they should not be the same for all institutions within a university—they should vary with the nature and extent of teaching, training and research programme in operation in different institutions of the university. Any move to introduce uniform measures of teaching load and work-load for all institutions within a university will tend to strike down the university standards instead of helping to raise the quality of teaching and learning.

Teachers of the categories of Professors and Readers have considerable research obligations and commitments. They have three types of research responsibilities. Firstly, they have to provide research guidance to Master Degree students who, in certain subjects, are required to write a dissertation which is more of a research exercise rather than a well reliable and validated piece of research. Secondly, they have to guide Ph D research students, whose number ranges from 1 to 10, which is the most challenging and time-thought demanding assignment for these two categories of teachers. Usually senior teachers have more Ph D students enrolled under them. Research at this level almost becomes a collaborative activity for the Ph D guide and the students. The guiding teacher has often to read, do field work and experiments along with the students who are researching or experimenting. In this context, the research work-load for such kind of conscientious Professors and Readers becomes quite great. Thirdly, they are also expected to do some research work themselves with or without the assistance from research fellows.

The point that is stressed here is that research obligations of Professors and Readers are quite heavy. This fact should be recognised. To attempt to equate sessions with Ph D students to discuss their research work with a certain number of class lectures, as it is done in some universities, is simply bureaucratic, uneducational and ridiculous. If we want good research work in our

university departments and colleges, then those who have primary and greater obligations for guiding high level research be burdened with small quantum of the teaching load. University rules about the teaching load of teachers should not be such that the urge for high quality research and creative work be reduced. After all a university stands on the quality of research output it makes! The University Grants Commission's thinking is that a Professor should not be loaded with more than 9 hours and a Reader 12 hours of teaching work. This norm is fairly good, as it permits a Professor or a Reader to discharge his research responsibilities.

CONCLUSION

The popular belief that college and university teachers have only a nominal work-load and have more periods of 'easy time' is not a fact. The work-load of Lecturers and Assistant Lecturers in terms of teaching work, tutorials, practical works, field-work is avowedly considerable. The University Grants Commission has also recommended a teaching load of 18 hours or 24 periods of 45 minutes each for Lecturers, which is indicative of the fact that a standard for teaching load is set for college teachers. This is further corroborated by the standard set by the All India Council of Technical Education. It has laid down 13 periods of work for Professors, about 20 periods of work for Readers or Lecturers, and 27 periods of work for Assistant Lecturers and Demonstrators. These standards are high enough. They dispel the popular misconception that the university teacher has not very much work than his counterpart in the school. In fact, the load of the teaching work for Lecturers is high enough to evoke resentment in some quarters; a definite concern is voiced against loading the lecturers with 16 hours and Assistant Lecturers with more than 20 hours of work per week, and thus down-grading the college teachers to the level of school teachers.

However, there is urgent need to place the concept of teaching load of college teachers on a more rational and scientific basis. The teaching load cannot be considered only on the basis of the single factor of class teaching or lecture work—in terms of clock hours. A number of other equally crucial factors must also be considered when a University Administration Office attempts to evaluate and fix the teaching loads of institutions. These factors are : the number and nature of different courses a teacher is assigned for teaching, class-size, the total number of students taught,

responsibilities for guidance and supervision of extra-class activities, the quantum of research guidance work, the individual research projects undertaken, number of classes per day and the total clock hours devoted to teaching. Adequacy of materials, supplies, clerical assistance and other conditions peculiar to a college or a department also affect teaching load.

These factors are such that can be quantified in varying degrees. But the calculation of teacher load should also involve qualitative factors. Teachers differ in their abilities, aptitudes and interests. Some teachers are good at lecturing to large classes and they enjoy this kind of work; some are good only in small classroom situations involving seminars and discussions; others are good at working with papers or in the field and practical work. The teaching load of teachers should be evaluated and equalised to the extent that is practicable, taking into considerations all such factors of individual differences. It is virtually impossible for the administration to achieve a situation in all institutions, (even within an individual institution) in which all teachers have the same teaching load. However, the efforts of the administrators, based on their best judgment in these matters, should be directed towards bringing about the best possible conditions for teaching and learning and research in the institution or institutions.

The problem of determining what is the ideal size of the teaching load for a college teacher will ever remain unsolved and will continue to be debated for long. University administrators and teachers are unlikely to have agreement on this issue as their angles of viewing this issue are different, often conflicting. Unfortunately, there is no research evidence available on optimum teacher load that can be considered reasonable for different grades of college and university teachers. The situation is further complicated by facts of expansion and developments of higher education. The trend in total number of students taught in colleges per day has been increasing. Class size and the total number of students taught per day are not settled issues in higher education.

The practical training and research work are becoming more complicated, time-consuming and taxing. Some educators like H. R. Douglass and his associates have established a formula to be used in calculating teacher-load. But this is again at the secondary school level. In the U.S.A. itself opinions among administrators differ on the value of the Douglass formula as a single index of teacher-load. The Douglass Teacher Load Formula involves

the following ingredients : Class periods spent per week, teaching classes for which population is very similar to that for some other sections, not including the original section; number of students in classes per week; subject coefficients used for giving relative weightage to classes in different subject fields; number of class periods spent per week in supervision, student activities, teachers' meetings, committee work, assisting in administrative or supervisory work or other operations and gross length of class periods in minutes.

Some research efforts should be directed to study the existing teaching load, evaluate it in the context of the needs of the developing society and formulate norms for different categories of teachers, in different subjects keeping in mind the instructional objectives of different curricular fields.

There is an urgent need to size up and understand the work-load of college and university teachers on a more rational and scientific basis than what has been attempted so far and place it on a basis that would stimulate them to better and varied work !

PROMOTING BETTER STAFF MORALE IN COLLEGES AND UNIVERSITIES

FACTORS AFFECTING STAFF MORALE

Accumulated evidence on staff morale in colleges and university departments shows that it has been perceptibly on low ebb since the last decade when expansion in higher education has gone up. Researchers have identified factors affecting staff morale, that fall broadly in two categories—extrinsic and intrinsic factors. Extrinsic factors include a wide variety of practices in private colleges that are usually termed as 'mal-practices', poor personnel management and the ingenious ways in which outside elements with political interests or ambitious individuals are manoeuvring to use colleges or university governing bodies to serve their personal ends. Intrinsic factors pertain mostly to poor academic and administrative leadership of the college principals or university department heads. High staff morale in colleges and university institutions is of supreme importance, because ultimately the standards of integrity set by colleges will become, to use the words of the Committee on Prevention of Corruption set up by the Centre, "an integral element of the intellectual and psychological outfit of every graduate".

MORALE IN PRIVATE COLLEGES

An inquiry was instituted sometime back by the University Grants Commission under the Chairmanship of Shri D. C. Pavate, the former Vice-Chancellor of the Karnatak University, to examine the extent of mal-practices, if any, prevalent in the universities. The Report of this Committee published in December 1968 has confirmed the prevalence of a number of irregularities and mal-practices in some private colleges and universities. The position seems to be more disturbing in private colleges. "Teachers are

not paid their full salaries, the managing committees often decide the books to be prescribed for various courses and the agencies from which they are to be purchased, the members of the managing committees sometimes bring to bear on the teachers various kinds of pressures, some of the trusts and educational societies which are running institutions are reported to be keeping two accounts to derive maximum grants from the Government. Such a state of affairs cannot but harm staff morale. How to control effectively the extrinsic factors that affect staff morale is a very difficult question. The factors are too complex and intermingled to be effectively controlled. University Syndicates and Academic Councils have not been able to refuse affiliation or disaffiliate such weak and sick colleges. However, in the interest of staff morale, the functioning of such colleges should be carefully watched by the university concerned. And, as the Pavate Committee has suggested, "mal-practices in administrative matters may be dealt with in the same way as those in government and public organisations."

ACADEMIC SIDE OF STAFF MORALE

While all possible efforts should be made to reduce the warping effects of the extrinsic factors affecting adversely the staff morale, the most workable strategy to improve the morale in colleges and university departments is to strengthen the academic and administrative role of the principal or the head. Some of the damage done by the extrinsic factors to staff morale can be retrieved by creating an academically stimulating climate in the institution that could give maximum job satisfaction to teachers and to the administrative staff. Researches point out that teachers whose individuality is respected by the head, who are made to feel important by assigning them tasks that they can best do, who are involved in academic decisions and programme planning and who are helped to develop a favourable attitude to their work through an in-service education programme, show a high morale and are more productive in their work.

NEW ROLE OF THE PRINCIPAL

A college principal or a departmental head can do a lot if he wills it and works in the right way to improve staff morale. But a good number of them are too much conscious of their elevated position as not to be able to come down and work

democratically with their staff. Not a few of them realise what tremendous gain would there be for the staff morale if they provide democratically creative leadership. A good number of them also lack the knowledge of techniques and tools of this kind of creative supervision. The unfortunate transformation that takes place in the affective and attitudinal sides of the personality of an individual when he is given the headship of a department or an institution tends to withdraw him from the close contact of his colleagues. But one hopes that such principals or heads would be few and we would have more principals interested in better college work through better staff morale. My thesis is: a college principal can do a lot in raising high staff morale through better leadership, human relationship and stimulating staff supervision.

A Principal should do these :

- (1) He must try to build up his leadership more on academic grounds rather than on his status;
- (2) However junior a colleague may be, he should respect his individuality and talent, and recognise the fact that often good ideas originate at the lower levels of the hierarchy;
- (3) As the Vice-Chancellor of Cambridge University, Sir Eric Ashby observes : " Not all professors consult their lecturers before decisions are taken as scrupulously as they themselves expect to be consulted by the lay governors in similar circumstances". This should be corrected.
- (4) The Principal or the department head should learn to delegate duties and powers to the colleagues below him;
- (5) He should learn to give credit to his subordinates when a work is well done.
- (6) He should guard himself against the common weakness to get some researches done by his colleagues or books written by him, published singly in his name or jointly under their names. Exploitation harms staff morale.
- (7) He should recognise the academic freedom and autonomy of his colleagues. As the Kothari Commission observes : " A teacher should receive all facilities and encouragement in his work, teaching and research, even when his views and the approach be in opposition to those of his seniors the head of his department or faculty."
- (8) He should try to associate his colleagues in institutional planning and decision-making to the extent that is possible

for him in the administrative set-up. This is recommended by most researchers who have investigated morale.

- (9) He should do all that is possible to promote good relationship within the staff and good solidarity. Unfortunately, some college principals indulge in the tactics of "divide and rule". Such an approach never builds up staff morale and the lasting respect for the individual who practises it.
- (10) He must build a democratic in-service programme for the professional growth of his colleagues.

A VICIOUS CIRCLE

It is possible that all college teachers will not appreciate or that some cannot profit by this new approach. It is also possible that some of them will abuse the delegation of duties and powers. *There are bound to be some black sheep among teachers as in any other human group.* But high staff morale and integrity will not develop unless teachers are trusted and unless they are involved in responsible work. It is a vicious circle. But it can be, and has to be, broken by some kind of vigilance and pressure of group morale and by helping the erring teachers to learn and correct themselves through guidance and counselling. Even black sheep can be improved!

CONFIDENTIAL REPORTS OF TEACHERS

The practice of writing confidential reports of the employees of educational institutions and education departments at the end of each year follows similar practice in other institutions and departments run by Government or Semi-Government authorities. The universities in India have also picked up this practice, like many others, from Government, and have made it a routine affair.

OBJECTIVES AND CONSEQUENCES

The Confidential Report is the legacy of the past British administration. Its objective was not only assessment and evaluation of the quality of work of individual employees including teachers and holding out a possibility of future rewards of recognition, but to keep a watch over his loyalty to Government and to ensure his disciplined behaviour. Any adverse remark in one's confidential report would mean doubtful prospect for one's future promotion and higher grading. Unfavourable confidential reports could be used to withhold or delay the regular annual increments due to an employee.

The writing of the confidential report being in the hand of the principal of the institution or the head of the department, proved quite a strong weapon of control. Unless one was mightily bold or headstrong, one would not dare to come in open or disguised conflict with the head even when the latter had supplied him all provocations for such a step, as it would mean spoiling his or her confidential reports and thereby jeopardising the future career.

LEAST FEED-BACK

This practice of confidential reports has continued in our universities even in the post-Independence years. It is practised year

after year in all colleges, departments and faculties of universities as a matter of routine. Universities have prescribed set forms which are filled out by the heads concerned mechanically in most of the cases

Often, the observation remarks of the preceding year in case of each teacher and each clerk are repeated with a few verbal changes or addition of a few lights and shades here and there

Only those teachers who are 'psychological cases' or who have chosen to pursue a defiant path would receive more careful attention and thought when the proforma of their confidential report is filled out. This is because all adverse remarks in confidential reports are communicated to the concerned teachers or clerks. Barring such exceptions, in a large number of cases, in almost all institutions, the confidential report is a dull, routine affair, hardly carrying with it any educational utility and having the least feed-back value

EVALUATING EFFICIENCY

The question is : why should we continue the out-dated practice of writing a confidential report when it is a poor tool of evaluation and has so very little feed-back value ?

If our real objective is to assess and evaluate the quality of individual teachers and members of the office staff, why not we set-up valid evaluative criteria and spell out the norm of efficiency for the staff ! We can then develop valid and reliable instruments to evaluate the efficiency and use the results of such evaluations, not to chastise a staff member but to provide him guidance and advice so that his work can be improved. Evaluation should be directed towards help and improvement

EXAMPLE OF AMERICAN UNIVERSITIES

In American universities, they do not have confidential reports of our pattern and content. At the same time, the quality of work of each instructor or professor is regularly evaluated. They use three types of evaluation for this purpose : (1) Self-evaluation by the teacher himself, (2) evaluation by his colleagues in the department, and (3) evaluation of his teaching in the classroom by students whom he teaches. In some universities, like the University of Michigan, the relative position of each teacher of each department in this type of comprehensive evaluation is prepared and communicated to him for his information

and improvement. Of course, no teacher is ridiculed for his low standing. He is given an opportunity to improve. If he fails to improve, he then quits the job in that university.

In English universities, evaluation of teachers is done in a different way. At the time of annual examinations, the external examiners visit the institution and evaluate both the content and the method of teaching of courses taught by individual teachers. This they do by examining the details of the content of courses and even by talking with a sample of randomly selected students. Here also, the objective is diagnostic and remedial. The external examiners would meet individual teacher, discuss out with him their observations and views on the content, organization and methods of teaching done by him in regard to a particular course. Their objective is predominantly to assist the teacher to effect improvement in his course work.

CONFIDENTIAL REPORTS SHOULD GO

The system of confidential reports of teachers as followed in our universities needs to be given a close look. It should be reviewed and recast in light of the changed objectives and changed attitude to teachers' work in colleges and universities. Whatever form the evaluation of teacher's work may take in each institution, it should be comprehensive, its purpose should be to diagnose weakness and suggest concrete remedial work and, as it is done in British universities, the emphasis should be shifted to the improvement of curricular content and organization, methods of teaching and activating student-learning. If this is done, our efforts to improve the standards of education in our colleges and universities would gather momentum.

PREPARING YOUNG MEN FOR COLLEGE TEACHING

PIVOTAL ROLE OF COLLEGE TEACHERS

The university or college is the most important social engine in modern times. It is the monitor who controls, or rather should control the quality of all levels of education, for to it is entrusted the preparation of our teachers, for not of thousands of our schools alone, but for hundreds of our colleges also. In all climes and climates, in the past and in the present, the teacher has always determined the quality of our schools, our colleges and our universities. The teacher is the vessel in which our culture and civilization are carried from one generation to the next, and in that context it is the teacher that determines the character, the intellectual content of our civilization and to a significant extent, even some of the dimensions of the development of our national economy. The college teacher has a crucial role to play.

The university or college is our chief reliance for prosperity and for security. In a way, the strength of our leadership in various fields of national development, including the political field, is dependent upon the strength of our institutions of higher learning.

APATHY TOWARDS PREPARING COLLEGE TEACHERS

The difference between strength or weakness in a university is a reflection of the quality of the teachers employed. Thus, whether we will have a healthy and vital, competent and dedicated or a weak, selfish, inefficient and opportunist leadership in all the fields of national development and functioning, would depend upon the learning and development we provide in our colleges and university departments of higher learning, as well as upon the scholarship, capacity, and preparation of our college teachers. Yet, until now, very little has been thought or done to prepare college teachers, and even less has been done consciously to attract

the best minds to the college teaching profession. If only half of what has been done to recruit and train good school teachers were done to choose and prepare young scholars for the college teaching profession, not only we would have less explosions of unrest, as happened in some of our universities, but also the teaching and learning that goes on in most of the classrooms of colleges would have been more stimulating and constructive.

COLLEGES FACING A CRISIS

In the last twenty years, there has been a mounting increase in college enrolment. The university and college enrolment that stood around 25 lakhs in 1947 is now about 15 lakhs, a six-fold increase. There has been, on an average, an yearly increase of a lakh of students in colleges and a transfer quantum of about 45 per cent from secondary schools to the preparatory colleges. Even if a teacher-student ratio of 1:15 is accepted, there will be an annual need of additional 7000 college teachers, besides some vacancies occurring in the present strength of 90,000 college and university teachers, on account of resignation, retirement and death. In most teaching fields in the years of near future, the colleges will face a crisis in meeting their requirements for well-qualified teachers. There seems to be a real need today to tell every first class college student that college teaching needs him. Of course, his recruitment for a college teaching job is going to be difficult, specially in basic sciences, engineering and technology and in medicine, because teaching is not now, and will probably never be, a road to great riches. Some of the talented young men and women would like to take up teaching assignments in colleges, as college teaching continues to enjoy considerable social prestige.

TRAINING COURSES FOR COLLEGE TEACHERS

At present there are graduate and post-graduate training courses for university degree holders who want to take up teaching careers in secondary schools. As no training qualifications are required for teaching in colleges and universities, no such training courses have come into existence for college teachers. This is an instance of the fact that our universities do not appear to be seriously concerned about recruiting qualified and competent junior lecturers. The accumulating evidences of teaching learning in under-graduate classes show that most of the new recruits to the profession of college teaching are not able to do their job confidently, clearly, effectively and even correctly. If a diploma course in college

teaching is instituted at least in one or two universities of a State, and if such a qualification is demanded of all fresh recruits to college teaching, it would undoubtedly ensure a supply of better junior college teachers.

ARE ALL COLLEGE TEACHERS BORN TEACHERS ?

Good teachers, whether of schools or colleges, are born, and they may not need any formal teacher-training. But all those who teach in colleges and universities are not born teachers. They would certainly profit very much from a well focused training programme. And, will not even born teachers do a much better job if they know the child's mind and the learning process more scientifically ?

IN-SERVICE EDUCATION OF UNIVERSITY AND COLLEGE TEACHERS

The Commission on Teacher Education in the U. S. A. had said "The quality of a nation depends upon the quality of its citizens. The quality of its citizens depends—not exclusively, but in critical measure, upon their education. The quality of their education depends, more than upon any factor, upon the quality of their teachers. The quality of the teachers depends largely upon the quality of their own education, both that portion which precedes and which comes after their entrance into the profession."

This is true not only about school teachers but also about college teachers perhaps in a more critical manner and to a greater extent, because, unlike the school teacher, the college teacher has no intensive professional training in a college of education. When so much of vital and highly critical significance hangs on the quality and competence of the university teacher, it is not only desirable, but highly crucial to provide him facilities to brush himself up academically, to get enlightened professionally and to be equipped with skills to teach well, to test well and to deal with his students well.

POSSIBLE CAUSES OF RESISTANCE TO THE IDEA OF TRAINING FOR COLLEGE TEACHERS

The in-service education for college and university teachers can take the form of both enrichment and modernisation of their knowledge in the 'content' area, and theoretical orientation as well as practical training to be provided to them in putting across the instructional or training programme offered by their institutions. There is a clear need indeed to cover both these aspects of matter and method in the in-service education programme of college teachers, the need for the latter aspect, i. e. training in the teaching craft, has assumed greater significance and urgency in recent times. And

the opposition that is there for the inservice education of college teachers is particularly in regard to the latter aspect.

There are several possible explanations for such unhappy antagonism to a noble and extremely useful idea. A few arguments that this author encountered from college teachers and administrators against the professional training of college teachers are summarised below. They provide pointers to the nature and dimensions of resistance to the in service training programme for college teachers. Any programme of in-service education of college teachers which is expected to succeed should take note of this kind of thinking prevailing among college teachers. The quotations are from university teachers' replies.

- 1 'In the past for a full hundred years, we never felt the need of training teachers of colleges. Even then India could produce mighty university teachers who did not go to a training college to learn their craft.'
- 2 'The famed universities of Oxford, Cambridge and London did not, even for once in their long distinguished history, feel the need for training their lecturers and professors and they have been doing since they are instituted an excellent job. Then, why should Indian universities bother about training their teachers!'
- 3 'General education for college teachers is of far greater significance than the professional training. What is taught under the head of methodology of teaching is of questionable benefit to the college teacher. Its value is exaggerated by most training college people, in comparison with good general culture.'
- 4 'College and university teachers are, generally speaking, persons of great ability and some of them even of original ability. It may be that special training in the teaching craft would not add much to their practical efficiency, they will find out their own methods and use them with success.'
- 5 'The university or the college itself is a great in-service professional training experience rather than a normal College of Education for the college teacher who has generally a well informed, matured and sensitive mind.'
- 6 'The college teacher, unlike the school teacher, has to work with matured minds of students. It is more the clash of minds rather than the training which should be a matter of concern for college teachers.'

7. 'To require college teachers to undergo training would lower their status to the level of school teachers, and the dignity and grandeur of colleges and universities will be lost.'
8. 'Nowhere—even in the leading universities of Columbia, Harvard or Chicago, do they have a full-time training programme for college teachers. College teachers need not be placed on the same plane as secondary school teachers and need not be subjected to the rigours and intensity of the current B. Ed. or M. Ed. programmes.'

These kinds of arguments and thinking one ordinarily encounters in the university circles against subjecting the college teachers to the rigours and intensity of training in the teaching craft. The class of university teachers and administrators who believed that like poets university teachers are born and they need no training whatsoever has been fortunately diminishing. Despite this happy turn, it is a fact that very little has been done by the universities, and the association of college teachers to break the resistance against the training of college teachers, which is more the result of misguided beliefs and inertia. The U.G.C. has been doing much for the in-service education of college teachers through the device of the Summer Institutes.

THE CONCEPT OF IN-SERVICE PROGRAMME FOR COLLEGE TEACHERS

One of the best means of breaking the resistance of college teachers and administrators is to clarify the concept of in-service programme at the college stage and publicize it widely among them through faculty meetings and staff discussions. The present opposition to the training of college teachers stems from two kinds of misunderstandings about the programme, viz., that all university and college teachers—junior members as well as post-graduate teachers and teachers of long standing and high qualifications—are to be exposed to the rigours of training, and that the training is to be formal of the type of the present B. Ed. or the M. Ed. courses being offered by colleges of education. The current concept of in-service education for college teachers is based on the idea of professional growth which would be relative to the professional needs of college teachers of different categories and standings. For instance, the in-service training of fresh junior lecturers would differ materially in the nature of the programme, duration and even the

methodology than the one for post graduate teachers, researchers, heads of the departments and even the Deans. In their case the programme would be more in the form of professional meetings of equals, sitting together across a table and sharing one another's thinking and experiences on subjects of common interest, or participating in work-groups or task-forces trying to size up common problems and developing suggestions or action programmes for tackling effectively their problems. The problems may be academic or administrative or both. Even profound scholars and great researchers need to check up occasionally or from time to time certain pertinent points related to their subject with co-workers in the field. The Conventions of Subject Teachers in Arts and Science disciplines of Teachers of Professional Education like Engineering, Medicine Teacher Education etc., the Conferences of Principals of Colleges, of University Administrators are all in-service programmes of professional growth or education for the participants. The programme of Summer Camps or of Summer Institutes recently launched by the UGC for college teachers is another kind of in-service programme. University and college teachers have accepted Summer Institutes sponsored by the UGC without any opposition. Some universities like the Sardar Patel University in Gujarat had organised some time back a series of seminars cum workshops for professors of university departments and of affiliated colleges and lecturers on improving the designs and contents of university examinations. It was another type of in-service education programme for college teachers. It seems necessary to spell out distinctly the in-service training programme for beginning junior lecturers, tutors and research fellows on the one hand, and for the college teachers of long experience and standing on the other. If the professional needs of these two broad categories of college and university teachers are properly figured out and appropriate in-service programme for them is developed, it will be possible to sell the idea of in service education at the university stage.

SOME RECENT DEVELOPMENTS IN TRAINING JUNIOR COLLEGE TEACHERS

It must be said that the awareness to provide some kind of training at least to fresh and junior college teachers has been steadily growing. The mounting pressure of numbers in colleges and university departments has resulted in crowded classes. Out of sheer necessity, the college administrators are forced to recruit

students, after their first year, experience of teaching at the undergraduate stage, the development of teaching methods by Schools of Education that can be effectively used in colleges and universities, orientation courses of a few weeks for junior lecturers, in-service guidance and counselling through demonstration, individual conferences and group-discussions by senior colleagues, the interchange of visits to the classrooms, while the teaching is in progress, by the heads of the department or senior colleagues and junior teachers to study their methods of teaching and ways of handling their subject (decided through mutual consent), and the establishment of a staff college in the bigger universities or a group of universities, to place the in-service training programme for junior lecturers on a permanent and continuing basis.

The Commission has observed that devoted scholars teaching in colleges or universities may be able to discharge their function satisfactorily—though this is not always a safe presumption—in spite of professional inadequacy. But, they have also said :

"The bulk of teachers unfortunately do not fall into these categories (i.e. of born teachers and devoted scholars). For them some suitable form of training and orientation is essential, not only to overcome their initial 'teaching' troubles and to create a sense of confidence, but also to give them a reasonable understanding of educational objectives and purposes, the *raison d'être* and place of their special subject in the curriculum, of new methods and techniques of teaching and learning and a knowledge of psychology on which good teaching should be based. No question of *amour propre* should be involved. In most highly skilled professions—and education is certainly one—training is regarded as an essential qualification".

ORIENTATION PROGRAMME FOR JUNIOR LECTURERS

The excerpt cited above from the Report of the Kothari Education Commission clearly testifies to the need for organising orientation programmes for junior college teachers in college teaching. The author of this book, prepared some time back a proposal for training young university lecturers, assistant lecturers, and so on. The programme is presented below just to serve as an illustration of orientation in-service programme for junior college teachers.

Objectives of the Programme The following are the specific objectives of the programme of short term training for the junior college teacher

- (1) To orient the junior university teacher in the needs, interests and problems of the college students of the age-group 16 17 to 19 20;
- (2) To help him develop skills in the techniques of teaching, tutorials seminars workshops and evaluation at the college level
- (3) To help him improve his ability to communicate effectively in the classroom use audio visual materials and techniques in his regular teaching ensure better student participation in the teaching-learning process provide better guidance to students in library reading and self study and thus improve his impact on student's learning and all round development of his personality
- (4) To introduce him to techniques of action research and small-scale experimentation so that he may handle more effectively the problems of teaching and learning and deal with some categories of behaviour problems improve his sensitivity to students needs and get some evidence regarding the effectiveness of his own teaching procedures.
- (5) To provide him with a broad understanding of some current problems and trends in Indian education in world perspective, so that he may understand his role as an educator more fully and play it more effectively

Size of the Group In order to safeguard the effectiveness of the training programme the enrolments should not exceed 30 at a time. It is also desirable that participants are drawn from different disciplines so as to provide a variety of training situations.

Duration of the Programme It is felt that six-week training with a three hour sessions each week day in the evening and a few class visits for demonstration and observation each week during he working sessions, should prove adequate

The Orientation Programme The course contents of the raining programme may be spread over eight main areas which will be as under

fresh young men who satisfy the minimum conditions of universities for appointment as lecturers in colleges. The affiliated colleges, in the light of their precarious financial sources, cannot afford to pay handsome salaries to attract the experienced college teachers: The following observations by our eminent educationist Dr. A. Lakshman-swāmi Mudaliar, made during his lecture series under the Dadabhai Naoroji Memorial Fund Prize Scheme, correctly describes the situation which is true for many of the affiliated colleges :

"Are we not aware today, that most of the colleges are manned by junior members who have not had experience and who certainly have not got the leisure to make themselves thorough with the subjects and who cannot by any means therefore command the amount of attention from students which they must of necessity have, if they are to prove themselves worthy teachers? Is it not a fact that in many of the colleges, persons within a few years after passing, find themselves as heads of departments?"

The high rate of expansion of higher education in the post-independence era has already been discussed elsewhere in this book. The number of university and college teachers has increased very much in the last two decades.

The forecast of possible increase of enrolments at the undergraduate stage in Arts, Commerce and Science in 1985-86 is 2.2 million. Thus, between 1965-66 and 1985-86, the enrolments at the undergraduate stage in these disciplines are expected to rise at an average rate of 5.3 per cent. The projected increase in professional education during the same period is from 1,95,000 in 1965-66 to 9,72,000 by 1985-86, or at an average annual rate of 8.4 per cent. Thus, the present period and the next two decades ahead would find so great and rapid expansion at the undergraduate level that it is likely to outstrip the facilities available in respect of staffing and equipment in affiliated colleges. The recruitment of fresh lecturers would therefore, continue to pose problems. The Kothari Education Commission also provides testimony to the prevailing practice among the college administrators to assign the youngest and least experienced staff members to teach undergraduate classes. "Some of them have neither the stature nor the experience nor the poise to win young men and women effectively to the pursuit of knowledge."

The recognition of the need for training fresh college teachers has been recently in evidence and is growing steadily. To cite only

a few examples, in the Memorandum that the Government of Gujarat had submitted to the Education Commission (1965), it was stated :

"The idea of giving training to college teachers seems rather new but it has been found by experience that such training is essential if the college teachers have to do their job really successfully. With the rapid increase in the number of colleges, the demand for college teachers has increased considerably. As a result of this, fresh graduates who are hardly twenty to twenty-two years old become college teachers and teach classes right from pre-university to Third Year B.A. Although a regular training course like the B. Ed. may not be necessary, some kind of orientation would certainly prove to be useful to the college teachers."

The recognition of training for junior lecturers by universities is also in evidence. For instance, the Syndicate of the M. S. University of Baroda passed a resolution in January 1965 to consider a programme of giving training to young lecturers of its various faculties regarding the methodology and techniques of teaching. A scheme of training junior teachers of the University was consequently drawn up, which was later on submitted to the U.G.C. as a pilot project for financial support. A healthy precedent has been created by the U.G.C. in agreeing in principle to give financial support for organising the Seminars on Methodology of Teaching for junior college teachers. The M. S. University of Baroda had taken a vital step in this respect by resolving in June 1966 that "for the new teachers appointed hereafter their participation in the Seminar on Methodology of Teaching be considered necessary during their period of probation." The Baroda University has also provided for holding the Seminar in the Summer Vacation and for the proportionate privilege leave to the participating staff as well as the teacher-trainees for attending the full-time course in the Seminar. This clearly shows that some of the progressive and dynamic universities of India have realised the need for helping the new lecturers to equip themselves in the methodology of teaching college classes.

The Kothari Education Commission too has made some vital recommendations for the pre-service and in-service training of junior college teachers. They include, among others, the pre-selection of their new teachers by affiliated colleges and universities and attaching them to the Major Universities for about a year for orientation towards their chosen profession, giving post-graduate

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| 1. Psychology of Adolescence and of Learning | 18 hours—(10 hours theory, 4 hours for practical work and 4 hours discussion) |
| 2. Techniques of teaching at the college stage | 18 hours (12 hours theory, 6 hours for demonstration and discussion) |
| 3. Special Field | 18 hours (12 hours theory, 6 hours discussions) |
| (i) Audio-Visual Education | |
| (ii) Educational Evaluation | |
| (iii) Education of the Gifted and the Low Achievers | |
| (iv) Guidance and Counselling | |
| 4. Current Issues and Trends in Indian Education in World Perspective | 13 hours (7 hours theory and 6 hours discussions) |
| 5. Methodology of Research and Elementary Statistics | 13 hours (7 hours theory and 6 hours practical work and discussion) |
| 6. Techniques of conducting tutorials, seminars and workshops | 5 hours |
| 7. Practical work will include manipulation of A.V. devices, effective exposition, techniques of note-taking, fast reading, setting better questions, etc. | 18 hours |
| 8. Professional ethics and human relations | 5 hours |

Total 108 hours

Procedures and Methods : In developing the procedures and methods of conducting the training programme, two essentials should be fully met with, viz. (1) focus on the felt needs of the participating college teachers, and (2) the balance of activities.

(1) *Focus on the needs of participants* :

It is envisaged that a major incentive for the junior Faculty members to participate in the training course will be the oppor-

unitiles it provides for them to focus on problems that concern them, problems that they are facing day-by-day in their college teaching. The theory and practical work planned for the training course should be viewed in relation to these problems. Thus, efforts should be made during the first week of the training programme to identify such problems through—

- (i) *self-analysis by participants.*
- (ii) *individual conferences with participants, a staff adviser and the participants' department chairman or immediate supervisor, and through.*
- (iii) *group discussion.*

(2) *Balance of Activities :*

The programme will be so planned that the activities will be balanced among theory presentation, group discussions and practical work.

CONCLUSION

In the light of the mounting enrolments at the under-graduate stage in our universities, the recruitment of fresh first class graduates or holders of first class or second class masters' degrees in colleges and, university departments will continue to pose problems of standard of college education and of student management and discipline. A bulk of these new recruits will not be born teachers or profound scholars to whom the method of teaching and dealing with students will reveal itself. The young lecturers would need in-service professional orientation or training. The young lecturers should be confronted with actual evidences, gathered through exploratory studies or surveys and research, regarding some of the inadequacies of classroom teaching in colleges, problems being continually faced by new teachers in class management, student discipline, class teaching, ensuring student participation in learning, conducting tutorials, making and assessing examinations, etc. and such other areas of concern to them. A review of research on experimentation of college teaching should invariably form the part of such a training programme. A productive inter-relationship between theory and practice should be worked out. In developing an effective in-service training programme for college teachers, the cooperation of the key persons in different faculties of a teaching university or in a group of neighbouring colleges in an affiliating university would be crucial. Plans should be worked out to involve

heads of departments or senior teachers in an informal way to identify or spotlight the inadequacies of teaching now going on in departments, so that steps can be taken to gear the programme of training to meet these needs.

Some attempts for developing training programme for college teachers have been made in some leading American Universities. For instance at Teachers' College, Columbia University, they have developed during past several years, an Ed.D. degree programme designed to produce college teachers. Some programmes in teaching fields such as "College Teachers of English", "College Teachers of History", etc., have been developed, providing a combination of work in the field of specialization and in the method of college instruction. At the University of Michigan, (Ann Arbor, Michigan) a Centre for Higher Education has been operating for about last 10 years. Its programme includes training, seminars and other arrangements for upgrading teaching followed in English and other areas.

It is now time that Indian universities move effectively towards providing in-service orientation or short-term training courses or setting up staff training colleges for junior college teachers, and organising Summer Camps, Summer Institutes, Seminars, Workshops, etc., and facilitating their senior and junior teachers in participating in their programme as well as in Conventions and Meetings of Subject Teachers and researchers. If guidelines on how to lecture effectively, how to prepare reading assignments, how to conduct group discussions and tutorials, how to set examination questions, how to prepare different varieties of objective tests, how to assess examination answer books reliably, and how to summarise, interpret and make use of examination results, are prepared by universities and if such literature is placed in the hands of all college teachers, a step of far reaching consequences will be taken in the in-service education of college teachers.

AREA 5 :

UNIVERSITY CURRICULA AND TEACHING

The function of a university, as defined by the Education Commission, couched in vague and abstract terminology as it is, does not lead us to any new thinking. It is as old as the art of education itself. What is more important is how to achieve it. The fundamental flaw in our university education, to my mind, lies in the failure of our methods of teaching and learning to awaken the active intelligence of our students and the inculcation in them of a desire to acquire knowledge by their personal efforts and through purposeful study. The emphasis is on 'lecturing' and 'spoon-feeding', the method is too mechanical and too dull to make any call on their spirit of investigation, their capacity for the acquisition of knowledge, or their ability and love of creativeness. Day in and day out, the students troop into the classroom, sit upright in their seats or crouch on the back benches, and suffer the infliction of orations, declamations and what not with commendable patience while the 'creative spirit' of most of them finds expression in taking down disjointed notes or drawing, not always very flattering, pen and pencil sketches of their teachers, of admiring and seeking the attention of faces, capable of launching a thousand ships and burning the topless towers of Ilium, and nodding in silent contemplation, 'A thing of beauty is a joy for ever'.

—Professor S. A. H. Haqqi

SOME CURRENT THINKING ON THE FRAMING OF SYLLABUSES IN UNIVERSITIES

Current thinking and practices in the science of curriculum development have emphasised certain essential ingredients for the framing of syllabi or course-contents which need careful consideration by the Boards of Studies of a university.

This paper attempts to summarize some of the current thinking on the framing of syllabi and course-outlines so that they may serve as some possible guide-lines to review and revise the current syllabi of universities if and where necessary.

The following four points are stressed in drawing up the outlines of syllabuses :

Firstly, instructional goals should be formulated as specifically as possible and they should serve as the basis and the starting point of determining detailed topics or course-outlines; secondly, the quantum of the course-contents or the size of the list of the topics of the syllabus should be according to whether they are intended to be taught for one hour or for more during a week throughout the term or the year; thirdly, the details of a syllabus should also include the tutorials and seminar, subject or areas and practical work where possible, and fourthly, the syllabus-outlines should include upto-date references, with the chapter number in the reference and text-books shown against each topic or unit of the syllabus.

INSTRUCTIONAL GOALS

The nature and the major function of the syllabi or courses need to be first taken into consideration while planning for any improvement therein. A syllabus is just a scholastic means to achieve in students certain instructional goals or realize some educational

outcomes. A syllabus is not absolute in concept and function. It is relative to what is intended to be achieved in students through their medium. A syllabus is just one aspect of the many types of the learning experiences to be provided to students to bring about in them a kind of growth in terms of knowledge, appreciation, skills, interests, attitudes, etc. Syllabuses are not, therefore, independent entities that can stand alone. In order that they are meaningful educational tools, they should have a reference frame in the form of instructional and learning objectives.

The Report on "Evaluation in Higher Education" published sometime back by the University Grants Commission has some strong comments to make on the current practice in Indian universities in framing syllabi in terms of detailed lists of topics. The report points out that syllabuses prepared in terms of listed topics "seem to convince all concerned that education is to be equated with some detailed information on each of the topics listed". This way of preparing syllabi tends to strengthen the misconception in the minds of teachers and students that the major purpose of instruction is merely the acquisition of information on each topic by students. The effect of this kind of syllabi, and the pressure of time and numbers of students tend to make, in many cases, information on each topic the major purpose of instruction for the teacher, the major objective emphasized by the examiner and the cramming of such information the major task undertaken by the student.

It is, therefore, crucial that while framing syllabi, the instructional goals in terms of the knowledge to be acquired, the competences to be developed, the attitudes and interests to be built up, the skills to be imparted, etc., are first determined. The subject matter outlines should then be developed solely on the consideration of their appropriateness and effectiveness to achieve the instructional goals set in the subject.

There are three ways in which the instructional goals can be set forth. One way is to list the objectives of teaching. The second way is to describe the purposes of the course in general terms. And the third way is to split up the broad objectives of knowledge, Application, Skills etc. in their specifics. The third way is illustrated below :

The knowledge objective may be split up into certain specifics, such as the knowledge of terminology, of specific vital facts, of

general principles, of methods and procedures, etc. The objective of Application can be split up in terms of ability to apply knowledge in novel situations, ability to interpret cause and effect relationships, ability to explain methods and procedures, etc. Skills can be analysed into ability to generalise from given data, ability to recognise assumptions underlying generalisations, ability to recognize the limitations of data, etc. and general skills can be split up as laboratory skills, performance skills (in art, music and so on), communication skills, computational skills, work skills, study skills, social skills, etc.

The learning outcomes cited above may not hold true for all subject areas. And they are not intended to do so. The outcomes would and should differ with the nature and the scope of the subject-field. But the point is that mere listing of detailed topics under a subject will not do. It is likely to vitiate teaching, learning and examination and reduce them to mere acts of rote learning.

It should be realized that every subject area of the school or university curricula is capable of serving as a means of achieving student growth in some desirable directions and ways. But much depends upon how the members of a department want to use the learning imparted in their subject.

A final consideration in selecting among objectives is the faculty's view of learning and how it takes place. "If the faculties view learning as simply repeated practices and drill over particular material or skills, then only a limited range of objectives will be regarded as possible. If the faculties view learning as the development of new insights and skills which can be related to new and complex problems, then additional objectives are regarded as possible. If the faculties understand how learning can affect personality and character and attitudes and interests, then such objectives are regarded as important and as possible of attainment even in the more traditional subject fields." The view of learning may set limits on the objectives regarded as possible. This view will, of course, determine the choice of learning experiences regarded as appropriate.

COURSES IN TERMS OF HOURS' WORK

The second consideration in framing a syllabus or a course is to apportion the quantum of the content to the time available for teaching-learning of the subject. It is much better if the syllabuses are framed in terms of the number of clock hours per week

that will be available in the time-table for teaching the course; during a term or the academic year. An hour's course would mean that there will be in a week either one lecture of 50 or 60 minutes' duration or twice the number of minutes' duration of laboratory work, or practical work or assignment or field work. The size of the contents of a syllabus should be tailored sharply on the basis of whether its teaching is intended to be for one hour or more hours in a week. If this is not done, some less important topics are dealt with while some important topics go untouched.

It is still more desirable that the size of the content of a syllabus is cut down according to the total number of hours likely to be available for teaching in a term or a year or more as the case may be, minus holidays given to students for preparing for examinations and days gone in conducting the examinations.

The Credit System works almost on the basis suggested here. One unit of credit constitutes a lecture or a seminar of one hours' duration per week throughout the semester (minus all holidays) of about 15 or 16 weeks (can also be more in a term). For laboratory work, one unit of credits is given to 2 or 3 hours of laboratory work per week throughout the semester. This is a practice in some American universities. Some of the Indian universities equate one hour credit with 50 minutes of lecture work or 100 minutes of laboratory work per week throughout the term.

LISTING OF AREAS OF TUTORIALS AND SEMINARS

The third consideration that should guide the framing of syllabuses is that besides listing topics or content-outlines it should also indicate the topics of the tutorials and seminars as an integral part of their frame-work, or the practical activities to be done by students during the term or the academic year.

At the university stage, tutorials, seminars, assignments, student activities, etc., are being emphasised so that they serve as corrective to single track learning and passive absorption of lecture-contents by students, and to ensure their active participation in the learning process. Thus, tutorials and seminars form an integral part of a syllabus as the detailed topics do. If the listing of topics of teaching is deemed essential in the frame-work of a

syllabus, the areas of tutorials and seminars should also be considered equally imperative.

SUGGESTED READING AND REFERENCE MATERIALS

It is customary to list the book of references at the end of a syllabus. The point that needs to be made here pertains to recommending modern books and new upto-date editions of text-books whenever possible, as knowledge in all fields is so fast developing that unless most modern text-books and editions are emphasised, the knowledge that the students would be acquiring would have many gaps and imperfections.

The second, desirable change to be made is to specify the exact number of chapters of textbooks and reference books against each topic of the syllabus, so that students can do independent reading preceding and following class lectures and can cover some topics unaided but through assignments.

TWO MORE POINTS

These are the major focal points in structuring a syllabus on modern lines. Sometimes two more points are also stressed.

Some advocate that a syllabus should also specify study-units as well as the teaching points under each study-unit. This approach is particularly deemed essential when a syllabus is so briefly devised that teachers and examiners would interpret its details (topics) in a different way. This tends to make examination invalid and unreliable when it is external. In order to remove the ambiguity, the topics of a syllabus should be organized around coherent study units and the points of teaching under each unit briefly elaborated so that they become meaningful and carry the same interpretation to the teachers as well as to the examiners. Further, if any unit or a point needs detailed treatment, it should be indicated in the syllabus itself.

The second point stresses the need for the omission of unessential details or less significant topics from the syllabus-outlines so that the load on students can be lessened. This point upholds the fact that a university is a centre of higher learning, and, therefore, the subjects taught in it should have such modernity and depth as to merit comparison with curricula of foreign universities in the field. This view, therefore, advocates that whenever university syllabi are revised or newly framed, the modernity, new elements and depth of learning should be brought in them.

CONCLUSION

Thus, in the current thinking on curriculum development, a premium is placed on the formulation of instructional goals, and gearing the syllabus sharply to these goals, in terms of formulating coherent study-units, elaborating each in terms of the teaching points, tailoring the size of a syllabus to the number of hours available for teaching the subject per week during a term or an academic year, bringing modernity and depth in the content, and specifying reference books with their chapter numbers against each topic of the syllabus. The current outlook and thinking further stress the integral relationship obtaining among the syllabus and instructional goals, instructional goals and examinations, and instructional goals, syllabus and examination.

THE REFORM OF THREE-YEAR DEGREE COURSES

HISTORY OF THE REFORM

When the first Indian universities were established in 1857, the Study for the initial Degree was made of four years. This was so because the universities were modelled after the London University of England and it had Four-Year Degree Courses. The European universities had also Four-Year Degree Courses. This pattern continued unchanged for over a century. Excepting for the Calcutta University Commission that met in 1917, no committee or commission questioned the wisdom of this arrangement. The Four-Year Degree Course, right from the start, was conceived of two halves, the first two years of Intermediate studies followed by another two years of post-Intermediate studies. The university examinations came at the end of each half. This pattern, first begun in Arts Degree courses, also stuck to Science and Commerce Degree Courses.

The Four-Year Degree pattern had revealed some crucial defects and disadvantages. The two halves—the Intermediate and the Post-Intermediate—were unrelated academically. In some parts of the country, the Intermediate Classes were under the administration of a separate Board, and hence the two halves were also administratively unrelated. The Intermediate Examination conducted by university came in the middle of the Degree programme. This tended to disturb the continuity of university teaching and learning. The ideal of a compact, integrated study at the level of the First Degree was not achieved. These disadvantages were on the university side.

There were disadvantages on the side of the university students also. As the Three-Year Degree Course Estimates Committee (1958) had observed, "The student, on his part, has to waste a considerable time in adjusting himself twice to new courses and often to

new colleges. It has also been felt that the number of examinations which a student has to take prior to obtaining the first Degree is too many and that there is often a long interval between the student's passing the Intermediate examination and his admission to Third Year Class which is so much additional waste of time."

The Calcutta University Commission had seen through these defects. In 1919, it had, therefore, made two important recommendations, viz., the dividing line between high school and university education should be drawn at the Intermediate and not at the Matriculation Examination and that three years' courses for the Bachelor's Degree, for Pass as well as for Honours, should replace the prevailing Four-Year Degree arrangement. The Three-Year Degree Course was to be preceded by an 11-Year Higher Secondary Course. Unfortunately, these recommendations of the Commission were not implemented by the Government.

Except for the Delhi University which changed over to the pattern of the Three-Year Degree Course in 1941, and later on the Mysore and Travancore Universities, the other Indian universities had continued to move traditionally, and followed the century-old Four-Year Degree pattern. Not that further attempts were not made to effect a change in the pattern of the Degree courses. In 1944, the Central Advisory Board of Education recommended categorically and strongly that "the Intermediate Course should be abolished and that the minimum length of a university Degree Course should be of three years".

In 1948-49, the Radhakrishnan University Commission again took up the question of the reorganisation of the duration and pattern of the first Degree courses. It recommended that "the students be admitted to colleges and universities in the Faculties of Arts and Sciences, and to such professional schools as do not require more advanced preparation, after the successful completion of twelve years of schooling or its equivalent; that is, after they have passed the qualifying test which will correspond to the present Intermediate standard" (Report, p. 138) "The course for the Bachelor's Degree in Science and Arts, whether for Pass or Honours is recommended to be of three years' duration".

The Mudallar Secondary Education Commission which made its recommendations in 1952-53 presented the same mode of thinking; it, too, recommended the replacement of the Intermediate stage by the Higher Secondary Course and the First Degree Course

in the university to be made of three years' duration. What was of special significance in the recommendation of the Commission was the emphasis it placed upon the reorganization of the First Degree Courses in universities as an essential corollary of the reorganization of secondary education in the country.

After the publication of the recommendations of the Secondary Education Commission, things began to move to effect reorganisation of the Four-Year Degree Courses into Three-Year Degree Courses preceded by a Higher Secondary Course. The University Survey Committee which the CABE appointed in November 1953, too, reiterated the recommendation of the Radhakrishnan University Commission and the Mudaliar Secondary Commission on the question of adopting a Three-Year Degree pattern preceded by a 11-Year Higher Secondary schooling. The CABE, too, endorsed this decision in its meeting held in February 1954. Then the chain of endorsements started. The Joint Conference of Vice-Chancellors of Universities and Chairmen of Boards of Secondary Education in January 1955, the Inter-University Board of Education in January 1955 placed their *dhobi* mark on the Three-Year Degree pattern. The Ministry of Education resolved to that effect in 1956. The Education Ministers' Conference gave further impetus to the reform in September 1956. A Committee was set up in October 1956 to draw up estimates for the introduction of the new pattern in the Indian Universities.

The above narration of the brief history of the reform of the Three-Year Degree pattern shows that all throughout the discussions and proposals on the reform, the emphasis was on the institution of the Higher Secondary Schools which would provide teaching-learning of the former Intermediate Standard, and that the reorganised Three-Year Degree Pattern should be able to ensure compact, comprehensive and integrated courses for the first degree, and the continuity of the university instruction.

ADOPTION OF THE REFORM BY INDIAN UNIVERSITIES

The reform came into operation with the universities of Baroda, Karnatak, Kerala, Madras, Osmania and Saugar first coming forward to adopt it. After 1958, every year some universities came forward to implement the reform, with the result that at the end of the Third Plan period almost all Indian universities excepting Bombay and the universities of the State of Uttar Pradesh had switched on to the Three-Year Degree Pattern. The reform

brought to each university that chose to implement it 50 per cent grant from the State Government and the similar percentage of the grant from the U.G.C. on expenditures incurred in expanding facilities that had to be done to facilitate the adoption of the reform.

DIFFICULTIES ENCOUNTERED

There were certain difficulties in implementing this reform effectively.

- It necessitated a prohibitively large financial outlay to introduce the scheme at the national level;
- University education being a State preserve, the Centre could not make much headway without the fullest measure of support and cooperation from the State Governments;
- The courses taught in Indian Universities revealed such a wide variety, that the reorganisation of under-graduate courses in a uniform way proved to be a very challenging undertaking.
- The reform necessitated the concomitant reorganisation of under-graduate courses, improvement of student-teacher ratio, reduction of over-crowding in affiliated colleges, building up of more classrooms and teacher cabins, strengthening of laboratories, replenishing of libraries, and a number of such other facilities in colleges and university departments. *This cannot be done quickly. And it needed large funds.*
- The reorganisation of university courses was dependent upon the prior reorganisation of secondary education into Higher Secondary Schools.
- The Radhakrishnan University Commission had linked up the introduction of General Education and the Three-Year Degree Programme.
- U. P. have a large number of Intermediate Colleges, and it refused to disturb the arrangement, maintaining at the same time it has already adopted the new pattern in spirit.

Some difficulties could be overcome, and some have remained unsolved.

In a number of Indian universities, the Three-Year Degree Pattern has been in operation for over a decade. It has found a place in almost all Indian Universities. It is now time to take the stock of the gains accrued from the reform, diagnose the difficulties and review the reform in the light of these findings so that it yields results that were expected from it.

The quality of High School or Higher Secondary School leavers has continued to be low. The main reason for this is that the introduction of the Higher Secondary course has not been carried out in this spirit everywhere, and that in the Higher Secondary Schools, teaching-learning could not be upgraded to the Intermediate Standard. Against this background, the dissatisfaction regarding the reform to the effect that it has not been able to yield the expected results is to be viewed and assessed. In universities, too, where the Pre-University Classes were set up, the expectation was that these classes would be used to give a good grounding in General Education, in the regional language and in the English language. But that has not to a large extent happened. This is another reason why the Three-Year Degree Course has not been able to lead to the substantial improvement of school and college education.

In another matter, where the lapse has been found is the teaching-learning process. It was expected that with the introduction of the Three-Year Degree Courses, it will be possible to have smaller classes where better contact and increased inter-action between the teacher and students would result. Under the scheme, the colleges and university departments were given more classrooms, more equipments and more teaching staff. This should have facilitated the adoption of effective devices of teaching-learning such as tutorials, seminars, workshops etc. But unfortunately teaching in the under-graduate classes has continued to be largely of the pattern of mass lectures. If some colleges say that they have tutorials, the term 'tutorial' is either a mis-nomer or what is passed as a tutorial is nothing but a mini-lecture class.

It was expected that the reform would pave a way to cutting down the number of examinations, and thereby to shift emphasis from examinations to learning. Only one examination at the end of the three years was envisaged. But the proverbial domination of external examinations in Indian universities has continued. Universities could not muster up courage to do away with external annual examinations out of fear of lowering their standards. Universities have been insisting upon holding three external examinations, one at the end of each year. These are over and above the number of internal class tests and periodical examinations. So, the examination load and pressure on students has continued—it has increased rather than decreased. These series of examinations

have continued to disturb the continuity of university study—a gain that was intended to be achieved through the introduction of the Three-Year Degree programme.

The reorganisation of courses on the semester basis is a much needed reform at the university stage. The adoption of the Three-Year Degree courses should have facilitated the introduction of this reform. But this again has not happened. It is true that the Semester System has found a place, in some form or the other in about 20 universities or deemed universities. However, the possibility of using the Three-Year Degree reform to make the courses more compact, self-sufficient and well-knit, to make them more elastic, to provide to the student a scope to select a combination of subjects of inter-disciplinary nature, and to organise teaching-learning and evaluation on the semester basis in the place of present yearly pattern, has not been properly explored and tried out.

The Three-Year Degree programme could have been used to reform university examination system. Its domination could have been reduced by giving more considerations and weightage to students' sessional work. This could have, in its turn, improved students' study habits and the quality of their scholastic achievement. But this advantage has been also allowed largely to slip away.

That in the last ten years during which the Three-Year Degree pattern has established itself, the standards of under-graduate education has not gone up is an undisputed fact. On the contrary fears have been expressed that they have gone down. There are several factors responsible for this situation. But the fact still remains that inspite of the strengthening of staff, libraries and laboratories, in colleges and university departments, as a part of the programme of the introduction of the Three-Year Degree Course, under-graduate education has not much benefited by these measures.

But these critical observations on the Three-Year Degree Course should not be construed to mean that the author suggests that the reform is a total failure and the huge amount of money spent on its implementation is a mere waste. Gains in some measure have accrued from the reform. There is no doubt about that.

It is the introduction of this reform which is largely responsible for the revision of the under-graduate and even post-graduate courses. Not only have the under-graduate courses been modernised

and considerably enriched, but they have been made well graded and spread out over the period of three years. The revised undergraduate curricula have made possible specialisation into related or allied fields, as major and minor or subsidiary groups. This is no small gain. The fuller benefits of this have not gone to the students not because the curricula were inadequate but because students who get into the portals of colleges and universities do not bring a well instructed and mature mind.

MEASURES TO STRENGTHEN THE REFORM

At the curriculum level, what now needs to be done is the organisation of three kinds of courses, the General, the Special and Honours Courses. The recommendations of the Kothari Commission also emphasise the same. These three categories are defined by the Kothari Commission in the following words: "We define a 'General' Course as one in which the student takes three subjects at about the same depth. The 'special' Course would be different in kind and provide for the teaching of three subjects on which one would be taken at a much greater depth than the other two. The 'Honours' course would be more challenging and require study at a higher level." (Report, p. 318). The Commission has suggested that the General Courses should be provided at two levels—Pass and Honours, but the Special Courses only at the Honours level.

This arrangement is likely to make the Three-Year Degree programme yield a better dividend. It will enable the universities to divert really competent students to Honours Courses of General and Special categories, keeping still the doors of their portals open (if they cannot limit their number) in General Pass Courses, to students who are not so well up to the mark. This 'would' also help universities to encourage good, well-equipped and well-staffed affiliated colleges by giving them the sanction to teach both the Pass and Honours Courses of the General as well as the Special Categories. The ordinary colleges, that spring up somehow or other, as a result of some kind of pressures which universities cannot resist will have to be satisfied with the teaching of General Courses of the Pass category.

All that has been said so far was on the deficit side of the balance. But there is something on the credit side also. Indian universities and colleges have now much better classrooms, libraries, laboratories, hostel facilities and student amenities. The staff-

student ratio has much improved. It became 1:17 in 1968 as against 1:20 in 1961. General Education has come to be introduced in almost all universities, as a part of the new syllabi. The affiliated colleges and government colleges have begun to receive a better deal from the U. G. C. Incidentally, the conditions of affiliation of colleges also have begun to be reviewed and improved. The gains in the improvement of curriculum have already been referred to.

CONCLUSION

Such are the facts of the development of the Three-Year Degree programme in the Indian universities. The advantages are there but the expectations regarding the upgrading of standards of undergraduate education to the level of former post-graduate standards are yet to be realised. The former unnatural and unfruitful break in the middle of the degree programme has been corrected and continuous undergraduate education has been ensured. Physical and material conditions of universities and affiliated colleges have been appreciably expanded and strengthened.

The ten years of experience of working out the reform of the Three-Year Degree Courses have revealed many gaps.

It has still not been possible to bridge the wide gap existing between the S. S. C. attainments and the pre-university courses. Students joining the first year of the degree courses find it difficult to follow lectures and text-books on account of the poor knowledge of English. The short duration of the pre-university course does not permit students to adjust themselves fully to the abrupt change both in the medium from the school to the university level as well as in the new area of studies. The system does not provide any means to ensure that students with right attitude, ability and interest are admitted to the First Year Degree classes, with the result that out of every 5 students that get into the first year degree class hardly 2 deserve to be there. Students with tiny bodies and perhaps tiny minds pass through the mill of graduation with considerable diffidence, misgiving and some kind of physical and mental pain. Class teaching has not improved—it is still lecturing, and learning consists mostly in taking down verbatim what the lecturer speaks in the class. There is hardly much intellectual interaction between teachers and students. The reform has necessitated requirement of more college teachers, but the teachers that most of the colleges are getting,

have immature minds, poor teaching skills, no professional orientation and not even the depth of subject knowledge. Tutorials organised in many colleges are still an eye-wash. In the name of integrated courses, still some of universities continue to follow the old courses, with the old wine cast into new bottles.

An evaluative survey of the impact of the new Three-Year Degree pattern on the university standards is overdue. Of course, this was done in a small way by the U. G. C. and the observations made by universities regarding the general assessment of the impact of the Three-Year Degree Course are published in *Appendix 7* of the *Report on Standards of University Education*. It is, however, desirable that the responsibility of such an inquiry is entrusted to an autonomous research agency as is done in the U. K. Students, teachers and administrators should have an opportunity to give their frank appraisal and comments. The results of such research would alone provide a firm base and firm guide-lines to strengthen this promising reform.

THE HONOURS AND PASS DEGREES

Universities ordinarily award a degree of 'Bachelor' as the first degree signifying the successful completion of an under-graduate course under the portals of a college or a university institution. The Bachelor degree thus marks the culmination of an under-graduate's career in a university. It constitutes an indicative or qualifying stamp-mark that the awardee of the Bachelor's degree has acquired knowledge, skills and abilities which proclaim him fit to enter a world of 'earning' which would maintain him and his family.

The first degrees awarded by Indian universities are called either 'Pass' or 'Honours' degrees. Some years back the 'Pass' degree used to be designated as 'general' or 'ordinary' Bachelor's degree and the Honours a 'Special Bachelor's degree'. The Kothari Commission has again sought to bring back these terms in the university usage. These Bachelor's degrees are divided into three classes. A First Class signifies the highest merit of scholarship and intellectual equipment. In the past, a First Class was sparingly awarded. Things seem to have changed now. In almost all Indian universities, the list of the First Class awardees at the Bachelor's examinations is becoming big enough to be conspicuous. It would have been a matter of pride and elation if the big list of First Class awardees really signify the level of scholarship having gone higher. But unfortunately this is not the case.

HONOURS DEGREES

The tradition of the Bachelor Honours degrees in Indian universities has come from England. They were first introduced at Oxford and Cambridge in the nineteenth century and later at the civic universities. The Honour Degrees had been concerned with the most laudable motives. They were intended to provide

a motivation and incentive to the bright young men and women, with serious bent of minds in the pursuit of knowledge and of excellence, to work to the utmost limit of their talents and abilities and thus realise their mental growth and development. The Honours Degrees were intended to be an intellectual challenge as well as an opportunity to exercise the mind to the best possible extent.

The Honours degrees were instituted in Indian Universities in Humanities and Sciences. They were not established in professional Faculties. It was anticipated that only a small number of serious minded talented students would go in for Honours degree courses. And that did happen in India and it continued to be largely so till the fifties of this century.

Until 1947, the Honours students remained in a worthy minority. But things began to change thereafter. The tide of rapid growth of colleges, universities, student-enrolment, and courses of studies in the post-independent India swept away the older concern and considerations for keeping academic standards of university education high. The doors of the Honours courses began to be thrown wide open, and talented as well as average ability students got into them. The earlier strictness of examination standards got 'slackened.' Colleges vied with one another, not always in a healthy manner, to obtain a higher number of First Class and Second Class Honours. This resulted in the inflation of Bachelor Honours Degree holders, and the Honours degrees have begun to denote less the high intellectual calibre and scholastic achievements. The Bachelor Honours degree certificate began to lose its claim to be a real certificate to the public of capacity and attainment.

With the introduction of the first Three-Year Degree Course the Honours Courses have disappeared at least from some of the universities. For instance, none of the five universities of Gujarat provides at present for Honours Courses. The Vice-Chancellors Conference (1962) regretted, and rightly too, this unhappy development. "It was regretted that many universities had given up the Honours Course with the introduction of Three-Year Degree Course. Apart from the possibility of providing an under-graduate course of a high standard for better students, the Honours Course could also be a preparation for post-graduate study, stress being laid on intensive study of the subject subsequently. In contrast to

Honours Course, the Pass Course would be of a general nature. It is, however, necessary to make post-graduate courses available to those who had shown special ability even in general courses."

The rationale of the Honours Courses is sound and the purposes are fruitful enough to justify the institution or continuation of Honours Degree Courses.

In the British universities, there are courses leading to Honours and to Pass degrees as well. But there is considerable variety obtaining in the pattern. For instance, from the outset students can take up either Honours Courses or Pass Courses and continue with them till they graduate. In some universities, students who are registered in Honours Courses have initially courses that are common to both the Honours as well as the Pass streams. They are formally admitted to the Honours Courses only after one year or so of study and that too if they show evidences of ability to do these Courses. In some universities, students admitted to Honours Courses are awarded Pass degrees if they fail to come up to Honours degree standard in the final examination. The same kind of thing happens in the case of students admitted to the Pass Courses. An Honours degree may be awarded to students who achieve distinction in the final examination. Of course, such a provision is in a few Pass Courses and in them 80 per cent or more usually receive Pass Degrees.

A broad study of the documented opinion expressed in the country, (which is quite small) leads to the following conclusions

—Honours Courses should be distinctly separated from the Pass Courses, but there should be some flexibility. If, at the initial stage, an Honours student fails to show promise, he should be transferred to a Pass Course. Similarly a student admitted to a Pass Course, if found to be a high achiever, should have an opportunity to take up an Honours Course in his subject. It should be possible for a student to transfer, at various stages, from an Honours to a Pass Course or *vice versa*.

—A student may be registered for an Honours Course, but the question of his being accepted as an Honours student be decided after one year on the basis of his performance. This would provide an incentive and challenge to students to work hard right from the beginning.

—A student admitted to a Pass Course should also have a scope to earn an Honours Degree if he achieves distinction in his studies.

—The Honours Courses may provide a high degree of specialisation in one subject or a broader basis through the study of two or three subjects. It is necessary to provide deep study courses involving a high degree of specialisation. The Robbins Committee has given a good justification for making such a provision. "There are unquestionably young men and women for whom study that involves penetration in depth is appropriate. They are eager to go to the heart of the subject and to develop powers of rigorous analysis and observation within its orbit". Such students would be there also in India as in any country, and for them it would be well to provide the specialist first degree course as it is done in the universities of England and Wales. Students well fitted to take up deep and specialised study will not be very many. A large majority of the students qualified to take up Honours Courses is likely to favour more the courses in broader fields. But the reason why they do not opt for such courses is that a kind of stigma of inferior status gets attached to such courses. If, through advisement and guidance, the fear of this type is removed, more students would come forth to take up Honours Courses with a broader basis, as in many walks of life, some knowledge of a number of subjects is more desirable than a deep and specialised knowledge of one subject.

—The Kothari Commission has suggested that the universities, which have much better facilities should alone provide for courses of deep study of a high degree of specialization. Thus, the Commission does not favour putting the responsibility of teaching specialized Honours Courses on all the university departments. It is clearly not in favour of affiliated colleges to be permitted to teach the specialization Honours Courses. One reaction to the Commission's recommendation is that the criteria to decide which university department or affiliated college is to be permitted to teach Honours Course of specialization should be fixed on such basis as the size of the student demand, the quality and adequacy of the staff, the necessary library and laboratory facilities, etc. There should not be a blanket disqualification for all private and affiliated colleges to teach Special Honours Courses. To economise on cost, one would agree with the Commission that it would be desirable to prescribe the enrolment of the minimum number of students before a Specialization Honours Course is allowed to be started.

—The duration of the Honours Courses would be the same as the Pass Courses

Thus, there is a need for the provision of Honours Course in Indian universities. There is also general agreement that Honours Course should be more challenging and should require study at a higher level. The earlier practice of Indian universities to require three additional papers in a field of specialization alone will not do. Similarly, a mere second class at the final examination for the Bachelor's degree should not be a basis of the achievement of a student to be upgraded to the Honours level. A Honours Degree should really denote a high standard of achievement in a general or a special field of studies.

THE PASS COURSES

The Pass Bachelor Courses are described as *Janata* courses, as they are intended to be taken by students who 'just' want to earn a graduate degree either for social prestige or for economic reasons. May be the Pass Degree students have not high intellectual interest, may be they do not have that capacity to pursue difficult studies, may be they have not enough extrinsic or intrinsic motivation in learning may be they have economic worries and hence they may be earning and learning—there are so many factors that influence one's choice to take up a Pass Degree Course. Often the decision is not with the student—external factors have already decided the issue for him. As such no student would like to take a Pass Course if admission in an Honours Course can be secured. But that is not always possible.

The popular thinking that the Pass Bachelor Degree students are of inferior mental abilities is a misconception and a myth. Studies have shown that 30 to 35 per cent of students with a Pass Bachelor's Degree have shone out later in the academic field or in private and public service, in legal practices, in business, in industries, in politics, in research and such other vital walks of national life.

This raises a vital question. Is the present practice followed by the Union and State Public Service Commissions and many other employing agencies to ban the Pass Degree holders from applying for the post advertised by them educationally, socially, and psychologically sound? Should a 'Pass Degree' constitute a permanent disqualification for an entry into higher and important posts of public office? For reasons stated earlier,

this should not happen. The Pass Degree Certificate does not invariably indicate inferior mental capacity. While this may be true in 50 to 60 per cent of cases, the other cases should not be condemned to mediocrity by a general yard of measurement. Such cases may have quite many a buried and hidden jewel. In a democracy, opportunities should be available to these hidden jewels to show out their lustre which may remain covered up for lack of opportunity. The Pass Degree Certificate alone should not be a sole criterion for judging a graduate as one of the third class calibre. Other evidences of one's abilities and capacity should be sought, and the final evaluation, whatever it may be, should be done on the basis of cumulative and comprehensive evidence of a person's abilities, aptitude and capacity.

In the case of the Pass Degree Courses, another fact needs to be examined through research : do they not have enough to keep the minds of the young men and women under-graduates engaged and well motivated in studies ? Do they not provide any intellectual challenges to the students ? These and such other questions become more crucial in the light of the recently growing student strife and riots on university campuses. Most of the trouble-shooters come from the community of Pass Degree students. They have more leisure, less studies, light courses, less reading, easy tests, etc. so that they have more time and energy left to hunt out real or feigned events of student-injustice, organise demonstrations, lead *marcha*, attempt *gherao* and incite others like them to indulge in brick and stone throwing. Idle brains and idle hands are the Devil's workshop.

It is time that the term 'Pass' courses and 'Pass' degrees is dropped. It has an unfortunate stigma of low calibre attached to it. The term that has recently gained in currency—general degree courses—is much better and this term should be used to replace the term 'pass' in courses and degrees. It will also do good to do away with 'Pass' Class. We should not admit students to qualify for 'Pass' degrees; we should not instruct or train them to earn a 'Pass' Class in the final examinations. It will do a world of good to students psychologically, educationally and socially if the 'Pass' Class is abolished. The standards of general degree courses will also rise if teachers—the examiners—do not downgrade the 'Second Class' grade or marks to the 'Pass Class'. The fear that if the 'Pass Class' is abolished, the examiners would give second class marks to students whom they would have earlier given Pass Class

marks, should have no base Teachers, who are also the examiners, should raise their level of teaching as well as of evaluation. We should try to do away with students who bring with them to their university studies an attitude of the leisured class of society, for whom three years of mild and intermittent intellectual activity is a 'pleasant interlude to the progress to maturity'. Sir James Mountford, in his book "*British Universities*" observes that "it is now only a very small minority of students who deliberately seek to enter a university or are accepted with a Pass Degree in view" This is something which should happen in Indian Universities also Like the Oxford and the Cambridge, we should have some top universities which should become universities almost entirely for Honours students

The Pass Degree Courses—now to be designated as General Degree Courses—should also be salvaged from the progressive debasement that is in evidence The General Degree Courses should be really such as to give a student some insight in a number of subjects In humanities, student achievement in their mother-tongue and English has particularly gone down The study of languages in them should receive priority in the programme of improvement of standards at the under-graduate level Without a sound and solid foundation of attainments in the regional language, Hindi and English, the student would be ill equipped to play his role as a democratic citizen The courses on General Bachelor's Degree should be so internally reorganised and strengthened and expanded so that they add up to a reasonably good general education. We may not aim in the General Bachelor's degree to make a student a high grade scholar, but then let him have some inkling of what constitutes scholarship The Pass Bachelor's Degree should be shelved from their present state of degeneration into a 'congeries of odds and ends of courses with no focal point' Each Pass Degree Course should be academically sound, should be useful as good general education and should be of repute

CONCLUSION

The Honours Degree Courses and the Pass Degree Courses in the Indian universities should be looked at in a fresh way The emphasis should be on the improvement of the standards of student learning as well as on the role that is expected of the young men and women graduates in the developing society like ours.

Students' equipment of the regional language, Hindi and English should be strengthened—this should receive priority in the programme of the improvement of under-graduate studies. Foundation studies in Humanities, social sciences, and Experimental Sciences should be developed which should constitute the basic courses in the first year of under-graduate courses. In the latter years of the Three-Year Degree Courses—General Degree Courses, the students should be provided such courses that they get broad based sound general education; in Honours Degree Courses, the focus should be on depth and varying degree of specialization, making provision for a high degree of specialization in one subject, two subjects or three subjects. These should be supplemented by some subsidiary subjects which occupy one or two years each, depending upon the nature of the subjects and students' previous background in them. It is worthwhile to scrap the 'Pass' classes in degree examination. This would, perhaps, lead to the improvement in the perception of the society of the Pass Degree holders and effect a change in its attitude to them.

INTER-DISCIPLINARY STUDIES

THE RATIONALE

The dissemination of the accumulated body of knowledge is one of the foremost objectives of universities. This body of knowledge is essentially one—an organic unity. For instance, physics, mathematics, astronomy, zoology, botany and so many other fields in science are essentially one; they all constitute that body of knowledge which is called the scientific knowledge and it, too, has evolved from natural philosophy. The knowledge has been branched into different fields or intellectual disciplines for the sake of the ease of dissemination—for the more tangible and effective organization of its dissemination. The organization of knowledge into different branches or disciplines has, historically, served a very useful purpose. But for this, the spread as well as the development of knowledge would not have taken place so fast and so well. The division of knowledge into fields and disciplines has helped the growth of knowledge in depth as well as in the width—it has given rise to specialization, and the concentration of research in different fields of specialization has resulted in the exposure to light of several aspects of knowledge that otherwise would have remained hidden. Thus, the branching of knowledge has done a world of good to the development and dissemination of knowledge from generation to generation. The studies on the basis of different disciplines or areas have played a large role in the growth and enrichment of knowledge. And in that lies the justification of discipline-wise studies in universities.

But this great gain has also created some unhappy traditions in the realm of curricula and research work in universities. Walls of division have been erected between one area of studies or discipline and the other. University studies have become rigidly discipline-wise. Knowledge has been tightly compartmentalized. Even within one discipline, specialization has tended to erect fences

of barbed wires. The notion that disciplines or within a discipline specializations are complete in themselves is a mistaken idea and a very unhappy trend in the university curriculum development. Knowledge is fast developing. Areas of separate branches of knowledge have begun to overlap with cognate and related fields. It has become difficult to continue to wall off branches of knowledge in water-tight compartments for long. In the interest of better and rounded development of knowledge intrinsically as well as in the interest of the student who is to be put on the track of the pursuit of knowledge and of excellence, this process of restricting the curricula of higher education purely on the basis of separate disciplines should be altered, and progressively more scope to interdisciplinary studies should be provided.

Our university curricula and studies are getting stale. Very little new ideas emerge. There are a number of reasons for this sorry state of affair. But one reason is that our studies in undergraduate and post-graduate classes are so restrictively disciplinary that the inter-play of ideas from different related branches of knowledge does not take place. New ideas, creative ideas emerge from a broad and a varied base of knowledge.

The Aligarh University Committee on Inter-disciplinary courses has stressed another point for developing inter-disciplinary studies—their great importance for a country with a developing economy.

"On the one hand, a developing economy means that avenues of employment of a new kind and at levels which did not exist before are evidently being created or need to be created. On the other hand, if the subject-combinations of students remain stereotyped or in fixed pre-determined patterns, then the ability of such students to find employment in the newly created situations becomes limited. Students trained in the traditional manner, therefore, keep on competing with an extremely large group of other similarly trained students for employment which is conventional and usually at a low level. On the other hand, students trained in a wide variety of combinations of disciplines have a great chance of fitting into new situations, and in important positions"

Looking both at the integrated nature of knowledge and at the potentiality of employment especially at a time when the number of unemployed graduates has been increasing and the country is faced with disturbances from the unemployed university products, it is

prudent, as well as, productive to provide for inter-disciplinary studies in our universities "The structure of education the university ordinances and regulations and the attitude of the university administration must all bend or be made to bend to provide for a free choice of combination of subjects to the extent to which the university resources would permit The Kothari Commission too has stressed that special efforts need to be made to promote inter-disciplinary studies in universities

INTER-DISCIPLINARY COURSES AT THE UNDER-GRADUATE LEVEL

The current thinking on curriculum development at the stage of higher education is that the nature of knowledge, the nature of creative work and the potentiality of employment warrant that inter-disciplinary courses should be planned both at the undergraduate and post-graduate stages

At the under-graduate stage inter-disciplinary courses are deemed very desirable The argument that is being put forward in this direction is that the bulk of the under-graduates is not going to take up the Honours Courses It is found that scarcely 20 to 25 per cent of students may be slightly more-able have abilities aptitude and motivation to go in for the Honours studies which are very much challenging and penetrating requiring a sharp mind To the vast majority of the under graduate students, General Degree Courses will do a world of good And the General Degree Courses provide clearly a good scope for the introduction of inter-disciplinary studies

The Radhakrishnan University Commission had made a very strong plea for the introduction of General Education Studies The Commission has brought out through deep analysis and illuminative interpretation the vital need for carrying forward the general education begun at the school stage right into the more mature years of the graduate life of the student, and the need for making him familiar with his physical and social environments and with human institutions, aspirations and ideals These are the areas which give an excellent scope for the organization of inter-disciplinary courses ; Instead of building specifically a course to be called General Education, it would be much better if the spirit of courses in the three-year degree courses breathes the pattern of General Education and provides broad studies which would fit the student into a variety of calling in public life

The Committee of the South Gujarat University on the Under-graduate Curriculum Reorganization (1968-69) under the Chairmanship of its first Vice-Chancellor, Professor C. C. Shah, has shown how inter-disciplinary courses can be well introduced in the General Education stream (the other two streams being the Special Education and the Honours at the under-graduate stage.) The Committee's thinking is that inter-disciplinary courses should be developed out of the courses that are currently being taught in the Faculties of Arts, Science, and Commerce. The aim here would be to provide a kind of a broad liberal education through integrated course content necessary for the citizens of the modern society. This Committee has further favoured the introduction of some courses of vocational nature from the second and/or the third year. This is to raise the job value of the General Education stream. The Committee has shown an additional advantage that is likely to accrue from this system of inter-disciplinary General Education studies, viz. the programme could make it possible to admit students in the universities who have not passed the S.S.C. examination with English or have failed in the Preparatory University Courses in Arts, Science or Commerce in English. These types of inter-disciplinary courses of general education value and significance have fairly satisfactory literature available for further reading besides the course textbooks. And hence the unacquaintance or inadequate acquaintance of students with the English language should not pose a real problem. In several Indian Secondary School Boards, the number of students passing the matriculation or equivalent examinations without a pass in English is increasing, and some universities are throwing open their doors even to those who have not studied English at all at the school stage. In such cases, these arrangements should prove useful.

The Proposal of the South Gujarat University in terms of suggested courses gives food for thoughts. It shows that it is possible to develop courses at different levels in languages, social sciences, and natural sciences, journalism, library science, rural reconstruction, commerce, agriculture and cattle-rearing. It is possible to add other vocational courses depending upon the resources available in individual university or college. It will be thus seen that the Three-Year Degree Programme of under-graduate studies of general education type provides an excellent scope for developing inter-disciplinary courses that would raise considerably the intellectual equipment and the employment prospects of the holders of General Education Bachelor's degrees.

The Aligarh University has also a good programme of inter-disciplinary nature. It prescribes at the under-graduate stage a certain amount of core work of inter-disciplinary nature. For example, in keeping with the large interests of their main subject of study, or the profession that they intend to enter, the under-graduate students are to select the main courses and subsidiary courses. These main and subsidiary courses do not have a rigid pattern of inter-disciplinary courses, not even of superficial inter-disciplinary courses. The student and his adviser are left with a free choice to determine what component courses would constitute the main subject and also some of subsidiary subjects. Here, two facts are stressed, viz, the intellectual requirements of the main subject and the abilities and aptitudes of the student.

One of the objectives of courses of study at the under-graduate stage is to provide to the student liberal education. This is, in a way, preparing the student for independent thinking, for critical examination, assessment and judgement and for creative and constructive work. In this sense, liberal education does not call for 'separate institutions nor always separate teaching programmes. The spirit of liberal inquiry should inspire all teaching'. This adds to the importance of organising the teaching-learning work at the under-graduate stage on the inter-disciplinary basis.

INTER-DISCIPLINARY COURSES

AT THE POST-GRADUATE LEVEL

The post-graduate stage of instruction and research has been traditionally a stage of a high degree of specialization, with the result that in Indian universities it has developed largely as a uni-disciplinary stage.

The Kothari Commission has clearly stated that it sees no justification for rigidity in university courses at the under-graduate as well as post-graduate levels and has expressed itself in favour of allowing students to opt for a combination of subjects. The view-point of the Commission is "The subjects which, in the past seemed to be far apart are now seen to be much closer and at the higher stages many of the traditional frontiers are breaking down. Therefore, combinations like mathematics and economics or philosophy or chemistry with biology, education or with any other subject should be permissible" (Report, P 318).

For the Master's Degrees in Arts and Science the Commission has deemed necessary that universities should provide, in addition

to the present one-subject courses involving a high degree of specialization, of combination of courses consisting of say one major subject and one or two subsidiary subject or subjects which cut across the boundaries of separate disciplines. To illustrate this view-point, the Commission has suggested various combination courses between education, sociology, philosophy, psychology, economics, law and mathematics. In the interest of better intellectual development and more social understanding and competence of our university young men and women, it is important to break the present rigidity and uniformity handed down to us by tradition. The sooner it is done, the better.

A high degree of specialization is one of the important objectives in Master's degree courses. But it is not *the* objective. It is true that we want to prepare students for deep scholarship; but it is also true that the products of universities of the post-graduate category will be needed by schools, public administration, social welfare agencies, industries, business and such other important walks of national life. And to serve these national interests, it would be necessary to provide post-graduate studies of inter-disciplinary nature and of broadly connected areas. At all centres of higher education, it will not be possible to provide post-graduate courses involving intensive specialization. At such places, it would be worthwhile for universities to attempt to provide a variety of modern subjects from which it should be possible for students to make worthwhile combination of subjects.

SOME DIFFICULTIES

To provide inter-disciplinary courses at the under-graduate and graduate levels, universities will need to take several steps.

Firstly, the present concept of Boards of Studies and of Faculties and their functions will have to be broadened enough to permit this kind of new combination of studies. This would need amendment of current university ordinances on syllabuses and curricula. This is not going to be an easy thing. It would involve a change in perceptions and attitudes of the members of academic bodies of universities to this unorthodox and revolutionary thinking. To effect a change in views and attitudes is a difficult task and it is a slow process. But this change will come if frequent discussions are held among the teaching staff of universities.

Secondly, a programme of inter-disciplinary courses will not work if the staff is inadequate. The provision of teaching many

courses needs more teachers. In the American universities, the inter-disciplinary courses are a great success, because each institution of higher education is adequately staffed. In the British universities, the staffing of institutions of higher learning is not comparable to what obtains in American universities. Hence, inter-disciplinary courses have not become a curricular pattern in the British universities either at the under-graduate or the post-graduate level. In Indian universities, the variety and strength of the university teaching staff is less satisfactory than is the case with the British universities.

Thirdly, this innovation would need the staffing pattern of university institutions or colleges broad-based. For instance, as Kothari Commission has pointed out, it would be extremely useful to have educationists on the staff of a college or department of sociology just as it would be desirable to have sociologists in colleges or departments of education. The same logic will apply to other departments or disciplines.

Fourthly, it will be necessary to assign newly entering students to advisers who will assist them in selecting different combinations of courses depending upon the main subject they want to study or the career they want to pursue, their abilities, aptitude and interest. Senior staff members or even properly oriented junior staff members can serve as advisers in this sense, and, therefore, the recruitment of a different category of teachers—advisers—may not be necessary as their function can be assigned to the regular staff members.

Fifthly, the scheduling of inter-disciplinary courses poses some problems. A number of departments are usually involved in teaching inter-disciplinary courses. It is, therefore, necessary to have a Committee consisting of the heads of the participating departments to frame an agreed time-table. They should bind themselves into an agreement that the time-table will not be ordinarily changed, and if a change is felt unavoidable, it should be done after prior consultation among themselves, and when a decision is reached to that effect, students concerned should be informed sufficiently in advance. It will be necessary to have some one to work as Co-ordinator of the time-table. Otherwise, confusion would result. In the American universities, inter-disciplinary courses function very smoothly, because there the time-table or schedule is a fixed thing. There are very few holidays and closures

of universities on account of strikes and other unforeseen events rarely happen. Even an event like a special Convocation of the University, the visit of some dignitary, the death of some important person and events like these are not allowed to disturb the set schedules of course instruction in different departments. When President Kennedy was assassinated in 1963, the author was teaching a course in the University of Michigan at Ann Arbor, U. S. A. He went to the class feeling fully confident that there would not be any student. But to his great surprise, he found the class in full attendance. Of course, the class was later on called off, but this incident illustrates the fact that in American universities, classes go on meticulously according to the schedule. This also largely happens in the British universities.

These are some of the difficulties in preparing and implementing programmes of inter-disciplinary studies for under-graduate and post-graduate classes. But intrinsically, the idea is good and academically rewarding. It is worth a trial in Indian universities.

CONCLUSION

Inter-disciplinary courses constitute a new thinking in Indian universities. The Report of the Kothari Commission has aroused the interest of the administrators and teachers of higher education in the curricular reorganization on this new basis. Some progressive universities like the Aligarh University have actually moved in this direction. The Aligarh University has introduced from 1967 inter-disciplinary courses both at the under-graduate and the post-graduate levels. The university organised a Symposium on the implementations of the recommendations of the Kothari Commission in December 1969 where the author had an opportunity to participate. The majority view-point favoured the introduction of inter-disciplinary courses. I would end this paper with citing concluding remarks of one of the participants at the Symposium: "It is a challenge to the constitution makers of the universities to whittle down the barriers between departments and Faculties in spite of various vested interests and to make rules which will make an open system of inter-disciplinary studies possible. We are convinced that such a system of education practised by any university would contribute a great deal to the development of the country and of the disciplines, and it will greatly help the students of the university in their future careers."

GENERAL EDUCATION PROGRAMME

The school education stage is largely general education stage. The Radhakrishnan University Commission was of the opinion that general education should continue into the more mature years of a student's life. The Commission, therefore, recommended that at the undergraduate stage, universities should organise "ten to twelve three-month General Education Courses for 20-25 hours." (Report, p. 129)

The considerations which influenced the Commission to recommend the introduction of General Education Courses were somewhat like these : "Higher education should not be looked upon as the acquiring of certain specialized knowledge, which would distinguish very much one educated person from the other. Good higher education should constitute a well rounded and balanced preparation for effective living "in varied circumstances and relationships." It must have the best elements of liberal education which, though not incompatible with acquisition of mastery in some specialized field or discipline of knowledge, fits the student, none-the-less, to live a fuller and richer life by participating in various and varied activities of the society. The education should give the student an understanding of real concepts of physics, history, biology and philosophy and should not lose itself in the knowledge of contents of physics, history, biology, philosophy, etc. The resulting values of higher education should be a cultured mind

Jose Ortega y Gasset has, in his illuminating book "*Mission of the University*" very pointedly brought out the evil effects and consequences of the highly specialized, narrow type of professional education that the modern universities have been attempting to provide to students. According to him, this specialized professional education has resulted in abandoning almost

entirely the teaching of the transmission of culture. Gasset has attributed the war-mongering attitudes and actions that are threatening the very existence of mankind to this wrong type of over-specialized higher knowledge, devoid of culture being given to our scientists, doctors, pleaders, soldiers, diplomats, and others. He says :

"The convulsive situation in Europe at the present moment is due to the fact that the average Englishman, the average Frenchman, the average German—are uncultured; they are ignorant of the essential system of ideas concerning the world and man, which belong to our time. The average person is the new barbarian, a laggard behind the contemporary civilization, archaic and primitive in contrast with his problems, which are grimly, relentlessly modern. This new barbarian is above all the professional men, more learned than ever before, but at the same time more uncultured—the engineer, the physician, the lawyer, the scientist."

What Gasset has tried to convey is that without the cultural values derived from higher education by way of general education, a person will not be a really educated person despite the fact that he may have obtained a distinctively high professional degree carrying a high measure of mastery in a specialized field. He will not be a good doctor, a good judge, a good technical expert, a good politician and even a good soldier.

Albert Einstein, himself, a great specialist, had pleaded for general education which would increase the range of intellectual experiences and the flexibility of minds of students.

It was the Radhakrishnan Commission which, in fact, gave an impetus to the promotion of General Education Courses in Indian universities. The University Grants Commission came out with a programme of financial support for the introduction of General Education Courses. The U.G.C.'s thinking was that the introduction of the Three-Year Degree Course which it began to advocate to the Indian universities to adopt, would provide an opportunity to them to revise their syllabuses and introduce General Education Courses. And it did happen that way.

As a first step towards the introduction of General Education Courses in Humanities, Social Sciences, Physical Sciences and Technology, the U.G.C. invited a few universities and colleges

to formulate schemes for the introduction of General Education Courses. The UGC appointed a Committee in 1958 to consider the ways in which General Education Courses could be introduced in the universities and also to recommend the pattern of assistance that might be made available towards that scheme. A scheme was initiated at the Aligarh Muslim University for the preparation of reading material for a General Education Course, in 1958-59. The Baroda University followed the suit. Several universities then followed. Part of the help given by the UGC to universities for the Three-Year Degree Course was utilised for the introduction of General Education Courses. This gave momentum to the movement for introducing General Education Courses in undergraduate classes. By the end of the Third Plan, in almost all universities, General Education Courses found a place.

POTENTIALITIES OF GENERAL EDUCATION PROGRAMME

The idea of providing General Education Courses to undergraduate students is basically sound. Its utility is unquestionable. It is mightily important to see that the students of Humanities and Social Sciences as well as the students of Physical Sciences and Technology should develop an awareness of areas of knowledge in other than their own special fields of study. It should, therefore, be the efforts of colleges and university institutions to ensure that most students of theirs are enabled to take a lively interest in the whole range of human knowledge in a general way instead of becoming narrow specialists in one field of study.

General Education Courses have another potentiality. They can be used to improve the under-graduate courses. We have already referred to it in the previous Section on 'Honours and Pass Degree Courses' how General Education can be used to provide a broad-based non-specialized education. The General Education approach and its spirit should be injected in courses and make them more balanced, meaningful and effective. As one of the Annual Reports of the UGC observes, "It is obviously desirable that students should have a clear understanding of a wide range of problems relating to modern life and conditions and should have adequate acquaintance with important areas of knowledge outside the field of their special studies."

General Education Courses should not be thought about, as it is unfortunately done in some quarters, as opposed to specialization. They can be complementary to specialization. Not only that, they can provide precious corrective to compartmentalisation of knowledge. A good programme of General Education should result in placing specialized studies in proper perspective.

GENERAL EDUCATION EXPERIMENT NOT A SUCCESS

Unfortunately, these potentialities of the General Education programme have not been realised in Indian universities. It is a fact that this programme has not become popular among students as well as teachers. Colleges and universities have introduced General Education because the U. G. C. wanted them to do so and because large funds were made available to them for its introduction at the under-graduate stage. By and large, the General Education Experiment has not become a success in the Indian universities.

It has very little impact on the improvement of under-graduate courses. It is doubtful whether the objective of making them more meaningful, balanced and effective has been at all achieved. It is equally doubtful whether this new programme had any impact on the reorientation and modernisation of the existing under-graduate courses. If the under-graduate courses were made somewhat upto-date, it was not because of the introduction of the General Education Programme. This would have taken place even without the promotion of this programme.

General Education was not intended to be an additional subject of study, not at all to be a subject of examination. It was to be more of an approach and a pattern of selection and organization of curricular courses aimed at providing students with a clear understanding of a wide range of problems relating to modern life and conditions. It was intended to be used as a means of arousing the necessary searching enquiries and questions in the mind of the student. But this has unfortunately been lost sight of in many universities. Specific General Education Courses are laid down instead of permeating general education spirit in all the under-graduate studies. Examinations are set in General Education Courses; passing in them has been made compulsory, and students' dislike and antagonism thereby are invited. General Education Courses have become so much distasteful that in some universities, the student body has demanded abolition of examinations in General Education.

HOW CAN GENERAL EDUCATION BE SALVAGED?

General Education is in real danger of being thrown out from under-graduate studies, unless prompt measures are taken by the U. G. C. and universities to rectify those defects which have aroused students' and teachers' antagonism to the otherwise a really good programme.

- General Education as a separate subject should be dropped.
- No subject as such should be designated as General Education Course and no examination as such should be set therein.
- The pattern of courses at under-graduate level be reorganised on the basis of general education as illustrated in the proposal of the South Gujarat University referred to earlier. (Three-Year General Degree Courses should be developed which would follow the pattern and approach of General Education).
- The Three-Year Degree Courses should be made more directly related to the need and interest of students and of the society.
- As the U. G. C. Committee of Vice-Chancellors (1968) has recommended, the instructional programme of colleges and universities should not only involve students' intellect but also the emotional aspect of their personality by giving them a sense of identification with the matters with which their minds are occupied during the period of their study.
- The same U. G. C. Committee has suggested that two subjects—one of sociological, economic and cultural significance and the other of scientific and technological importance be introduced at the Pre-University Class and at the First-Year Class at the under-graduate stage as obligatory subjects. The Committee's observations are worth quoting and its recommendations worth adopting :

"The aim of General Education courses was however strictly limited in scope and has not enabled the Indian students to develop a general awareness of the problems of contemporary life in their proper perspective. A better alternative would seem to be to introduce at the Pre-University stage and in the First Year of Three-Year Degree Course a short compulsory course in, say, History of Freedom Struggle, Plans and Problems of Indian Development, and the Contemporary World. The idea is to make it possible for the under-graduate student to develop a sense of involvement in the events taking place both in his country and in the world at large. It is perhaps possible to add to these, such subjects as the Modern World of Science, Problems of Modernisation (Rapid Social Change), the Current Agricultural Education, etc., which can inspire in

the under-graduate student a sense of participation and also can, in a way, balance the feeling of detachment that often characterises a study of purely intellectual disciplines."

CONCLUSION

The programme of General Education was introduced in Indian universities and colleges with great expectations. Unfortunately, it did not receive a fair treatment by those who sought to implement it. In their over-enthusiasm, they made it an additional subject of study on a compulsory basis, with passing in examinations in General Education also obligatory before students can be accepted for the first final degree examinations. The preparation of reading and instructional materials in General Education did not also proceed on lines expected by those who conceived the introduction of the programme in Indian universities. Lectures in General Education areas were not entrusted to the best teachers who could breathe life in these courses—junior lecturers and indifferent senior teachers taught these courses. This tended to make the programme unpopular—even distasteful—on university campuses. A demand is gradually being raised to scrap General Education Courses.

Against this background and against such a setting of unpopularity of General Education Courses, the new programme of compulsory studies of Contemporary Life suggested by the U. G. C.'s Advisory Committee of Vice-Chancellors should be viewed. Let not these new courses be labelled as General Education Courses. The subjects of the Modern World of Science, Problems of Modernisation, Agricultural Revolution, Freedom Struggle, etc., should not be taught in the routine way of dead lecturing. The major emphasis should not be on imparting the information but on creating in the students a sense of involvement. This would need other methods, approaches and aids in addition to lecturing. Tutorials and Assignments would be best useful. To ensure continued interest and concern for study on the part of students, and to demonstrate the fact that universities recognise the significance of these studies, it will be necessary to provide some kind of evaluation in these subjects. But it should not be of the stereotyped nature—the essay test. Other evaluation tools such as objective tests, reading assignments, participation in discussion, etc., should supplement the formal evaluation in these subjects, if at all the latter is deemed essential.

There is definitely a need for rethinking on General Education and reviewing its programme in Indian universities !

POST-GRADUATE TEACHING AND RESEARCH

Whitehead has said, "a progressive society depends on its inclusion of three groups: scholars, discoverers and inventors". Universities are undoubtedly the agencies for producing these three types of leaders. The post-graduate teaching and research programme of universities should have this large goal of discovering talented graduate students who will as scholars, as the Radhakrishnan Commission has said, "rediscover the past and set before us ideals of wisdom, beauty and goodness, as discoverers find out new truths, and as inventors apply them to present needs." (Report, p. 140)

If our universities are to discharge this kind of responsibility effectively, they should take eleven vital steps in regard to their programme of post-graduate teaching and research: Firstly, they should admit students of ability and of real aptitude only to their courses in post-graduate training and research; secondly, they should step up the enrolment of post-graduate and research students; thirdly, enroll them on a full-time basis by providing them the necessary free-studentships, scholarships or loans, fourthly, strengthen and enrich the post-graduate teaching and training courses by modernising the content, improving the organisation and permitting a combination of subjects of inter-disciplinary nature; fifthly, set up strong centres of post-graduate teaching and research; sixthly, place the teaching and guidance of these students in the hands of well qualified, conscientious and competent teachers; seventhly, enrich our libraries, laboratories and workshops and provide more opportunities and create more congenial conditions of work to motivate students to use these learning tools to a large extent; eighthly, to lay greater emphasis on teaching methods such as guided reading assignments followed by tutorials (discussions) seminars, workshops, programmed learning etc.; ninthly, make

evaluation of student achievement in post-graduate courses really vigorous, searching, continuous and comprehensive by using a variety of tools and techniques; tenthly, even at the doctoral research, introduce the cognate and related subjects so that candidates get a real grasp of subjects which are related and contributive to the subject of research, and provide for better selection of research problems and guidance; and lastly, improve organizational and administrative arrangements for the post-graduate and research programmes in each of its institutions which have resources and facilities to undertake such a programme.

ADMISSION OF ABLE STUDENTS ON FULL-TIME BASIS

The standards of post-graduate learning and research depend largely on the quality of the intake for these courses. Universities which provide Honours Degree Courses will have comparatively an easy task to make decisions regarding admitting students in their post-graduate programme. Students with sharp intellect and penetrating mind would naturally be the first choice. At the post-graduate stage, students have to do a lot of independent reading and thinking. This requires a particular bend of mind and certain study habits. While selecting students for admission to the post-graduate courses, some evidences on these should also be sought as far as possible. These could be found out to some extent in interviews by the Students Admission Committee consisting of some senior teachers of the department or the Institution. Language-mastery over the English language is also a crucial factor. In a number of universities, at the post-graduate level, the medium of instruction and examination continues to be English. In some fields in Master's Degree Courses, a student is also required to write a dissertation which would also be in English. He would thus need a fairly good command over expression in English. Poor or inadequate knowledge of English on the part of students affects seriously their scholastic performance in periodical tests, assignments, dissertation, the final examination and the viva voce test. Good knowledge of English, even if it has to be used as a library language, would be indispensable. As the U.G.C. Committee on University Standards has observed, "The University student's ability to understand and use the English language is, in our view, so essential for the maintenance of standards that a high priority has to be given to attainment in it in our post-graduate programmes." (Report, pp. 74-5)

In many universities in India, two types of post-graduate students are there. Some are enrolled on 'part-time basis' and a small number on a full-time basis. The part-time students are largely those who are engaged in remunerative work during the day. They go to the university or to the college to attend classes on Saturday and Sunday and sometimes on one more day during the week. This they do because they have to earn along with their higher studies.

There is a lot that can be said in favour of giving facilities to students coming from middle class and poor class society to earn and learn. But economic considerations alone cannot be the decisive factors in higher learning. Students who serve elsewhere during the week do not go to their classes with a serious, earnest and studious mind. Most of them go just to get their attendance recorded. More than half do not take examinations, as they hardly get time to prepare for examination. This constitutes a huge wastage. And among those who take the examination, there are quite a good number of students whose reading is limited to 'notes' dictated to by professors or typed out by the old students. Extensive and intensive reading, matured thinking, weighing and assessing of what is read, digesting and internalising the acquired knowledge, which are the crucial requisites of post-graduate learning are hardly to be found in this part-time category of students. It is, therefore, necessary that students for Master's and also for Ph. D. research work should be full time students.

Restricting enrolment in post-graduate classes to the full-time students is good as an idea. But it would create serious difficulties to students who have to support their families and support their education; they will have no resources excepting income from a job to provide this double support.

This would necessitate the provision of free-studentships and scholarships to the post-graduate students enrolled on the full-time basis. But the number of scholarships awarded by the universities is extremely small at the post-graduate stage and that, too, carrying a small amount. In many countries of the world, a substantial part of student assistance comes in the form of loans rather than by grants as is done in the U.K. and the U.S.S.R. We should also be able to provide loans, if not more grants, to needy but able students.

The Kothari Commission has discussed the question of university scholarships and student-aid. Its recommendation is that the target

for university scholarship to be reached should be about 20 per cent at the post-graduate stage and that, too, by 1976 (Report, p. 118). This scholarship should be at least of Rs. 200 per month. The Union Ministry of Education's insistence that such scholarships should not exceed Rs. 100 per month for Master's degree students has not proved very helpful. Provision of scholarships goes without being utilised in certain post graduate courses like education because a student with a B. Ed. degree is likely to earn about Rs. 250 per month by being a teacher in a school. Similarly, the scholarship for Ph. D. should be Rs. 250 to Rs. 300 p. m. Only then we can hope to get well motivated and able students.

The condition of full-time attendance is going to make enrolment of post-graduate students, in a sufficient number and of good calibre, difficult. It would be necessary to make some adjustments in rules for attendance which would ensure some, if not all, advantages of full-time attendance in the post-graduate classes. This adjustment can be in the form of a guarantee to be secured from each student that he will put in at least four hours of study work in the college including the library or the laboratory or the workshop. In certain affiliating universities where they have post-graduate study centres located over scattered places, they have a rule that the post-graduate student remains in the Centre on every working day at least for four hours. If a student gives an undertaking that he will devote four hours of study work every day in the college or in its library, and if post-graduate teachers prepare reading and study assignments for such students, exact them and use them for periodical internal assessment, this arrangement will ease, to some extent, the difficulties of the economically poor students—they can do some part-time remunerative work and also continue with their post-graduate studies. This seems to be, at the present, the only alternative to restricting post-graduate admission to full-time students only.

It is also suggested that for those students who cannot do post-graduate studies on a full-time basis on economical grounds, but are otherwise able students and keen about doing post-graduate work, some arrangement for long term part-time courses utilising the winter, Christmas and summer vacations fully to the extent possible or organising correspondence courses should be made by Indian universities. It is possible to develop good longer programmes of part-time teaching-learning at the post-graduate stage or even correspondence courses. But this would need good planning and

preparation on the part of post-graduate teachers. They must have enough leisure time to prepare study assignments, to set them to students, to make books easily available to them for reading and study, to read and assess the assignments and to discuss out with the students. This would need improvement in the student teacher ratio for the post-graduate classes. This should be preferably 1:6 and at the most 1:10. Any thing more than that will make the work of the post-graduate teacher weak and irregular.

Whatever alternative arrangements for full-time post-graduate studies are made, they should invariably conform to the uniform standards. The quality of teaching and learning in full-time, part-time or correspondence post-graduate courses should almost be of the same level. Under no circumstances, the standards of post-graduate teaching or learning can be allowed to weaken. There can be no compromise on standards, particularly at the post-graduate stage. As the UGC Chairman, Dr D S Kothari has pointed out in his Convocation Address to Vishva-Bharati (1963), "Quality is important at all stages, but when it comes to post-graduate studies and research, even the second best is not good enough—it will not do. We must go in for the best attainable."

STEPPING UP ENROLMENT AT THE POST-GRADUATE STAGE

The demand for the post-graduate outputs of high grade quality has been increasing. The programme of upgrading of high schools into higher secondary schools has lent an edge to stepping up the output of the post-graduates in Arts, Science and Commerce subjects. The Committee on "Standards of University Education" has noted a new tendency among employers to demand a post-graduate degree for which a first degree would have sufficed. This, the Committee explains is "due to the low standards of most of our graduates. In other fields of public and private activities, too, the services of the post-graduates with their superior attainments are in greater demand" (Report, p. 40). Thus, there is really a good case for stepping up the enrolment in the post-graduate courses of our universities.

In 1950-51, the post-graduate enrolment as a proportion of the total enrolment in our universities and colleges was about 5 per cent. During the First Five Year Plan period, this percentage slightly dwindled and became 4.3 in 1955-56. Since then it has

fluctuated. It was 6 per cent in 1960-61, 5.5 per cent in 1963-64, 5.3 per cent in 1965-66 and has remained almost constant since then, i.e. at 5.2 to 5.3 per cent. (It was 5.3 per cent in 1967-68.) In British universities post-graduate students constitute 14 per cent of total enrolment in universities. Thus, the proportion is rather low in Indian universities.

It will be interesting to note the growth of post-graduate enrolment in different faculties from 1956 to 1966. Taking the year 1955-56 as the base with Index 100, we find that by far the largest enrolment has been in the Faculty of Agriculture (Index 605—a little more than six-fold growth). The second best has been in the Faculty of Medicine (Index 432)—it has more than four-fold growth. Commerce with an Index 333, Engineering with an Index 328 and Science with an Index 327 have more than three-fold growth. Law with an Index of 286, Arts with an Index of 270 and Education with an Index of 250 have more than two-fold growth.

In research enrolment also, the highest growth has been in Agriculture (Index 768), the second best in Engineering and Technology (Index 632) and the third best in Commerce (Index 451). Medicine with an Index of 340, Science with an Index of 320, Arts with an Index of 293 and Education with an Index of 222 follow suit. In 1967-68, the Research enrolment was 30,449 which constituted 0.5 per cent of the total 22.19 lakhs of enrolment in the universities and colleges in that year. The numbers of students who passed M. A. and M. Sc. in 1949 were 4,654 and 846 respectively. The same numbers rose to 27,960 and 8,009 respectively in 1966. The highest output of the Doctorates has been in Science followed by Humanities. In Science it increased from 511 in 1963-64 to 683 in 1965-66 (an increase of 33.0 per cent), and in Arts from 412 in 1963-64 to 541 (an increase of 31.3 per cent). The doctoral output in 1965-66 in Agriculture was 92, in both Medicine and Technology it was 39, Commerce 20, Education 17 and very insignificant in other disciplines.

This has been largely the position in respect of enrolment in the post-graduate studies and research. In 1965-66, the enrolment at the post-graduate stage was 1.08 lakhs or 11 per cent of the total enrolment at the under-graduate stage (which was 9.88 lakhs). The Kothari Commission has estimated that to meet the growing manpower needs of the country, the proportion should be raised

to about 30 per cent (i.e. the enrolment should be increased from 108 lakhs to 960 lakhs) by 1986. The Commission has recommended that the average annual increase should be 11.5 per cent. The Commission has given the following reasons for a large expansion at the post-graduate stage and research (Vide-Report, p. 305)

- “— We expect a proportion of teachers even in lower secondary schools to hold the Master's degree,
- We have recommended that a Master's degree should be the minimum qualification for all teacher educators both at the primary and at the secondary stage
- The enlightening of the duration of the higher secondary stage uniformly to two years and the expansion visualised at this stage will need a very large number of teachers with post-graduate qualifications
- The large expansion visualised at the under graduate and the post graduate stages itself will need several times more teachers with post-graduate and research qualifications than at present, and
- The number of professional persons needed in research, agriculture, industry and the services has to be increased very substantially.”

Thus, there is a great need to step up enrolment in post-graduate studies and research. But that should not be done by diluting standards of admissions. Admissions should be related to the existing facilities in departments or colleges, particularly the staff-student ratio which, according to the thinking of the Kothari Commission, should not exceed the proportion 1:8 at this stage. The distribution of M.A. and M.Sc. students between the university departments and affiliated colleges is about 4:3—this is high enough for affiliated colleges, a large number of which, as the U.G.C. Committee on Standards of University Education has opined, “do not have sufficient competence for imparting such (post-graduate) instruction” (p. 41).

The condition in regard to supervision and guidance of post-graduate research is not very happy. To quote again from the *Report on Standards of University Education*, ‘Cases have come to our notice of professors having to supervise the work of more than 20 research students. Even the practice prevailing in some departments of permitting 8 to 10 candidates to register under

humanities and in some areas of social sciences as well as in natural sciences. But there are other areas where post-graduate training may be more profitably taken after some years of actual experience in the field or in the world of affairs. In education, for instance, a student will profit more from a post-graduate course if he joins it after having worked for a few years in teaching or administrative positions at primary, secondary or higher stages of education. The same may be true in the fields of commerce, medicine, engineering and technology, agriculture and even law. For such experienced persons, the compressed post-graduate courses can be offered. The Robbins Committee has said, "In technology, for example, courses upto one year's duration for those who, having had outside experiences, wish to qualify themselves in some new specialized field or new technique have already proved of great value. We consider the development of such studies at the post-graduate level, particularly after the student has had some years of experience, to be a matter of national importance." (Report, pp. 101-2). The same can be true of the Indian situation also.

DEVELOPMENT OF STRONG POST-GRADUATE AND RESEARCH CENTRES

The justification of a university lies more in its capacity to provide a rich and strong programme of post-graduate teaching and research. In the case of unitary and teaching universities, this responsibility is more direct and more weighted. But this responsibility has been also well stressed for affiliating universities, each one of which is expected to have some post-graduate departments of teaching and research.

The expansion and enrichment of post-graduate teaching and research in Indian universities are mostly a phenomenon of the last decade and a half, specially after the establishment of the University Grants Commission (then a Committee) in 1953. The efforts of the U. G. C. have brought about remarkable expansion and improvement in the resources of post-graduate departments. During the Second Plan alone 103 new post-graduate departments, 64 in universities and 39 in affiliated colleges were established. More came up during the Third Plan. Before 1955, post-graduate teaching and research were confined to university departments and a few scattered affiliated colleges. Most of the universities contented themselves with providing post-graduate instruction in a few subjects, the remaining bulk of the post-graduate work was done

in post-graduate centres in affiliated colleges, a large number of which got themselves recognised as 'post-graduate centres' for reasons other than their own adequate and competent resources. Recognition of affiliated colleges as post-graduate centres was a matter of prestige and a number of colleges sought this recognition by exercising pressures on their Syndicates, and Academic Councils on political, institutional and even caste-community considerations. Things have begun to improve in the current decade. In 1962-63, out of the total 1938 colleges in the country, 348 or 17.9 per cent were concerned with post-graduate teaching. The number of colleges has become 2,899 in 1968. With this expansion and with many more universities coming into existence, it is certain that facilities for post-graduate teaching and research must have increased appreciably in contrast to such limited facilities before Independence.

At present post-graduate teaching and research are done in two categories of colleges, viz. university departments and post-graduate centres consisting of some selected affiliated colleges. The justification for the latter lies in the fact that a large number of colleges have come into existence at places which are far away from the seat of the university, and there is an increased demand in mofussil centres for post-graduate education. In a democracy where equality of educational opportunity is deemed crucial, students of far-off places should also have a reasonable opportunity to improve their economic prospect by doing post-graduate and research work.

In the past, in the case of far-off situated affiliated colleges, the practice with many universities was to recognise one or two qualified teachers of a college for post-graduate work and permit the college to run post-graduate classes in those subjects only. These classes suffered naturally from poverty of resources in terms of libraries, laboratories, etc. Post-graduate teaching consisted mostly of week-end one or two lectures which often depended upon the mood, health and convenience of the post-graduate teachers. Quite often students travelled from neighbouring towns and villages to the class just to get their attendance marked, and sometimes presence was marked on the basis of the postal correspondence between the teacher and the individual students. The teacher took some lectures but mostly he dictated notes, which were regarded quite sufficient for passing the post-graduate examinations. Neither the teacher nor the students had any keenness or concern for deep scholarship and for the pursuit of excellence.

Some universities like the Gujarat University improved upon the situation by organising post-graduate centres zonewise. For instance in 1964, the University had 4 post-graduate centres in the Ahmedabad zone, 2 in the North Gujarat zone, 7 in the South Gujarat zone and 7 in the Saurashtra zone. Each centre was to have at least 2 recognised post-graduate professors or one recognised post-graduate professor and two recognised assistant professors. Even these arrangements have not brought about substantial improvement in the quality of post-graduate teaching and learning as well as of research. Post-graduate degrees continue to be cheap.

At present, the distribution of M. A. and M. Sc. students between the teaching departments of universities and affiliated colleges is roughly in the proportion of 4:3. The proportion in the case of affiliated colleges is unduly high and damaging, because, as both the U. G. C. Committee on '*Standards of University Education*' and the Kothari Commission have observed, "barring a few outstanding colleges, real research facilities in affiliated colleges are very limited or non-existent." Moreover, the facilities in terms of competent teachers, libraries, laboratories, etc. in a large majority of colleges are weak and the standards achieved by students admitted are low. If this situation is to be improved, it will be necessary to take steps such as the following :

- The bulk of post-graduate teaching and research has to be concentrated in the university departments and their constituent colleges.
- Unless an affiliated college has good library and laboratory resources and well qualified staff, it should not be recognised for post-graduate work. And even in that case, it is much better to recognise a group of closely situated colleges as complexes for post-graduate work by pulling together their resources. It is such complexes which should be recognised as university centres. The Kothari Commission has also made a recommendation of a similar nature. "We recommend that the bulk of post-graduate and research work should be organised in the universities or university centres where good programmes can be developed co-operatively by 3 or 4 local colleges under the guidance of the university." (Report, p. 312).

- It should be made obligatory for each student to spend at least four hours on every working day in such post-graduate centres.
- The libraries of such centres should carry a number of copies of the basic text books and a sufficient number of important reference-books in the subject.
- One would agree with the Kothari Commission that the bulk—to the extent of 80 per cent or more of post-graduate and research work—should be done in university departments, and university centres. However, affiliated colleges cannot be altogether precluded from the scope of such a work. There are some affiliated colleges of long standing—constituting about 10 per cent of the total affiliated colleges in the country—which have potentiality of providing quality post-graduate work. Such colleges should be selected by the U G C for improvement and enrichment in the matters of their resources and staff so that they too, can be brought into the family of institutions that should be entrusted with the post-graduate and research work. The selection of such colleges should be left to the U G C. Otherwise pressure tactics would be applied on the individual universities by powerful and influential college managements to get for their institutions the benefit of the U G C help.
- Since 1964, through the initiative and with the support of a cent per cent grant of the U G C, 26 Centres of Advanced Study have been established in some Indian universities. These Centres are in the fields or disciplines of physics, chemistry, botany, zoology, geology, mathematics, astronomy, economics, history, philosophy, sanskrit, linguistics and education. Fifteen of them are in sciences and the remaining 11 are in Humanities and Social Sciences. These Centres were intended to strengthen the post graduate teaching and research in the country and to channel the existing rather limited resources effectively for the purpose. These Centres should be directed, in a larger measure than what is being done at present, to strengthen the post graduate teaching by enriching the content-knowledge as well as research technique competencies of the post-graduate teachers in their fields by enlisting their participation in Summer Institutes and Seminars, by organising teamwork in studies and research, by accelerating their concern

and the realisation of 'international standards in their specific fields and by creating a climate among the post-graduate departments and centres for the pursuit of 'Excellence'.

The U.G.C. has been putting considerable efforts for the improvement of post-graduate teaching and research work in Indian universities. The Commission has been giving substantial grants to several universities to establish new and strengthen old departments of teaching and even contributing to the improvement of constituent and affiliated colleges. However, a lot still remains to be done in this respect. The U.G.C. is handicapped by the limited funds that the Centre places at its disposal. There is a strong view in the country that the Government of India should accept the exclusive responsibility for post-graduate education and research. The Kothari Commission has also expressed itself in favour of this view. The same has been the dominant thinking in advanced countries of the world. For instance, the U. S. President's Science Advisory Committee on 'Scientific Progress, the Universities and the Federal Government' has strongly recommended to the Federal Government of the U.S.A. to support adequately the basic research and post-graduate education in terms of the welfare of the society as a whole. Using the language of this Committee, we can also say, in our context : "The truth is as simple as it is important : whether the quantity and quality of basic research and post-graduate education in India will be adequate or inadequate depends primarily upon the Government of India. From this responsibility, the Centre has no escape. Either it will find the policies—and the resources—which permit our universities to flourish and their duties to be adequately discharged—or no one will."

HIGH GRADE POST-GRADUATE TEACHERS AND STIMULATING CONDITIONS OF WORK

The maintenance of high standards of post-graduate teaching and research depends firstly on competent and adequate staff and then on other things such as up-to-date and adequate facilities for library, laboratory or workshops. The teacher is really a crucial factor more at this stage than at the undergraduate stage. Whatever efforts and funds are spent on recruiting high grade teachers and researchers will be, in the ultimate analysis, well spent. Good students will flock to the departments or colleges of post-graduate and research work that have well qualified and competent teachers of renown. It is not only necessary to exercise meticulous care in

recruiting high grade teachers but should leave no stone unturned in retaining them once they are selected in the department or the college. Efficient and learned teachers are the greatest assets of the institution and on them the department or the college will stand or fall.

Post-graduate teaching and research are generally handled by teachers of the categories of professors, readers and senior lecturers if the last category of teachers have adequate post-graduate and research qualifications. In 1968, there were 1,606 professors and 2,575 readers in university departments or colleges and 11,655 senior teachers including principals of affiliated colleges. This number of teachers comes to be 15,836 who, by and large, will be deemed fit to be teachers of post-graduate classes and guides of post-graduate research. The total number of post-graduate and research students in that year was 1,28,729. The proportion between teachers and students therefore comes to be roughly 1:8. This is undoubtedly not unduly high. The Kothari Commission has held a ratio 1:8 satisfactory at the post-graduate stage. If the post-graduate teaching is to be given to more students, then it would be necessary to increase, by new recruitment, the number of good, conscientious and competent scholar and researcher type of post-graduate teachers. A mere good number of teachers will not do. Teachers shall have to be well-trained and experienced. Here, the Centres of Advanced Studies set up by the U.G.C. in the 26 Indian universities can contribute a lot by way of providing them in-service training programmes. This aspect of the role of the Centres of Advanced Study has already been referred to earlier.

Insufficient equipment, inadequate library facilities, inadequate funds, lack of proper accommodation, heavy load of undergraduate teaching and long hours of routine work are some of the heart-breaking handicaps besetting the path of post-graduate teachers and researchers in Indian universities. Some universities or colleges aggravate the situation by demanding mechanically and unimaginatively irrational work-load from post-graduate teachers. In this respect, conditions in American and British universities are so superior that critics who compare the output and quality of work of Indian universities in respect of post-graduate and research work with those of the foreign universities will miss the entire point. These cannot be compared at all. For the common man, and even for those who sit in the Senates and Syndicates of Indian universities

and who criticise inadequate and low research outputs of Indian students, it is hard to understand the handicaps that beset the scientific worker in India at every step.

If the size and quality of post-graduate teaching and research work are to be increased and improved, it will be absolutely necessary to create better conditions of work. Nothing should happen in institutions that bring down the staff morale. Not only that, the conditions and climate in the department or the college should be such that the staff motivation for conscientious and quality work increases. The Radhakrishnan Commission had observed that in our universities there were not a few people who are lethargic people. "The reason for stagnation among teachers was not so much lack of opportunities in the way of library and laboratory facilities as sheer unwillingness to put in hard work and learn more". It is true that in every department or a college, one would find three or four persons who are not intellectually stimulated, who, by their laziness, try to justify that they have no reason to work more than their allotted periods of teaching, they can call off classes if they are ill-disposed or out of mood, and that research is not an integral part of university's work—it is a mere luxury. These teachers are either cases of psychological illness or the results of bad handling by the heads of the departments or their principals. University post-graduate teachers are, by and large, not lethargic people. If their output of work is not what it should be, the reasons are often to seek in less congenial conditions of work and bad handling of teachers by the head or the principal.

There may be instances in almost every university or college when the management or administrators have not used tact and better human relationships in handling sensitive teachers. While it is true that they cannot, and should not, unduly pamper high-quality teachers, at the same time they should not say or do anything which makes good teachers feel that the institution does not care very much whether they continue or leave. The loss of a good teacher is a great loss, particularly at the post-graduate stage, as he not only imparts good knowledge, but he constitutes a precious influence for students. No institution wedded to the ideal of greatest benefits to students can afford to lose such great teachers. Sometimes highly intellectual teachers are also somewhat eccentric or very much sensitive. They are to be handled by the management with a little understanding, patience and tact. If the

teachers are well-treated, if proper human relationship is exercised in relation to them, if the staff-morale is kept sufficiently high, these teachers will be able to deliver what is expected of them. They will use their leisure and life of tranquillity—the two essentials for good post-graduate work and research, in not only imparting the existing knowledge well but, in a real sense, in creating new knowledge.

I would refer to one more point before this section is concluded. In certain post-graduate departments, it may be possible that the number of students is small. In the university Senates and in the public, a voice is often raised against such 'extravagant' expenditure. Such criticism is unfortunate and is not based on the understanding of the real function of a university. A university stands for dissemination and creation of new knowledge. It cannot wait till it gets a larger clientele. It has not only to cater to the needs of the society but create a need in all vital fields. The work of a post-graduate teaching and research department cannot be judged by the number of students. And there are certain fields in a Faculty like Fine Arts such as sculpture, music and dancing, where a teacher cannot take more students at the post-graduate stage. The legs of such departments should not be pulled by pointing out frequently that in them the average annual per student cost is prohibitive. Post-graduate and research work are going to be expensive. But money spent in them is a sound investment, the dividend of which will be reaped by the society in the longer run.

METHODS OF TEACHING

I have already dealt with this subject at length in an earlier Section. I would only add, by way of reiteration and lending further emphasis, that how one teaches and guides research at the post-graduate stage is very crucial for the high standards of student learning. In most of the subjects, especially in Humanities and Social Sciences, the most commonly used method, in teaching post-graduate courses is lecturing which, to a large extent, turns out to be spoon-feeding. It is crucial that students at the post-graduate stage are involved in penetrating discussion and in intellectual effort. The student's mind at this stage cannot be allowed to remain passive and inertly absorbent. It has to be internally aroused—made more inquiring, searching, critically reasoning, projecting in future, and reaching its own conclusions. The lecture-method, even if it is used by the best teacher, cannot achieve this kind of growth in

the student. What is, therefore, necessary for the post-graduate department is to limit the lecture-method to the teaching of core subjects where the enrolment will be ordinarily high. But even there it will be necessary to assign reading assignments and preparation of term papers which should be used as a basis of penetrating discussion in smaller seminar sessions. The practice of dictating notes should be rooted out firmly. It is the student who should be involved deeply and, in a larger measure, in the learning process. Lecturing will not achieve this. The role of the teacher is to be that of a stimulant, a director and a student's conscience keeper, and of an evaluator. A post-graduate programme is not worth undertaking where the students' maximum intellectual efforts are not provided for and not stimulated adequately. The reading assignments followed by seminars is the most desirable method of teaching-learning at the post-graduate stage. It must be remembered in this connection that the seminar approach will break down if an adequate number of reference-books are not easily available in the library for students to prepare their assignments and also if the assignments are not of a nature that provide stimulating, searching, weighing and evaluative questions.

The technique of micro-filming has made the contents of all the libraries of the world easily available. Once the micro-film exhibiting projector is provided for in budgets, the films as such are not very costly and are within the means of Indian universities or colleges. It is one area where the U. G. C. grants and assistance will prove crucial for raising the quality—the range and depth of student learning and eventually scholarship at the post-graduate stage.

RESEARCH DEGREES

A general feeling about research degrees of Indian universities is that they are not high and comparable to those of universities abroad. The reasons for this low quality and low prestige of the post-graduate degrees of Indian universities are somewhat as follows :

- Research problems are selected with little intellectual efforts on the part of students and approved with least critical examination on the part of teachers.
- There is a tendency to select such research problems which are easy to be investigated and the research methodology of which is also straight-forward. In a number of cases research

guides prefer such research problems which are worked out in other countries, and the research methodology of which is known to them. There is not much willingness and enthusiasm on the part of research students and guides for selecting problems, the methodology of which is challenging and rigorous.

—As the Kothari Commission has observed, a collection of research topics even in a vital field like various branches of Science on which doctorates are awarded by Indian universities is "a curious mixed bag and if one were to pick at random, one is likely to meet with a topic which both by its very formulation and by its scope would be considered to be behind the times by at least ten to twenty years" (p 348)

—In most of the disciplines, the topics of research for the Master's Dissertation as well as of Doctoral Theses are not selected by those who are going to do the research, viz, the students on the basis of their aptitude, abilities, the time they could devote and facilities available in the institutions, but they are given—almost dictated by the research guides. Students also want that research problems are given to them by teachers.

—In Humanities and Social Sciences, students prefer to have more library-study type of research problems. They show little preparedness, under one excuse or the other, to go in for such research problems which necessitate intensive field-work.

—The inadequate attainment of English both as a tool of comprehension and expression, constitutes a very great, in some cases almost insurmountable, handicap for research students.

—The time available to post-graduate teachers for research guidance is also a crucial factor. When they are loaded with heavy work of teaching at the under-graduate level, they struggle against time to meet their research students, discuss with them patiently and in depth their research problems, do themselves some thinking and reading on the problems and guide the work. In fact, a research guide in order that he guides well his students has himself to read, think, analyse, interpret and judge along with the research students. He should be a co-traveller in the journey leading to the completion of the research.

Selection of students for doctoral research should be done with considerable probing. Any one who is enthusiastic for

doing his or her Ph. D. cannot be accepted. The student himself must have devoted some thoughts to the problems. He must have ideas about how he will like to tackle the research problem—the research design and the research methodology. The student must face a small group of departmental heads or senior teachers in subjects that have a bearing on the research problem and should satisfy them through discussion about his competence to do the research work. His competence in the English language should also be critically examined. In other words, the test for selecting students for admission to the doctoral degree should be a rigorous one and searching.

A few other measures need also to be adopted with a view to raising the standards of doctoral research in Indian universities :

—Inter-disciplinary researches should be promoted on a large scale.

—There should be a research committee instead of one research guide for the research to be guided. One of the members, under whom a student would work more frequently and in whose subject field of specialization his research problem falls will be the Chairman, the others would be the members giving guidance on those aspects of the research in which their competence lies. The student should have individual as well as joint conferences with the guides in the initial stage as well as in the final stage, and sometimes also at the intermediary stage, to discuss the progress of his research and the problems.

—The first year of the doctoral work should be spent by the doctoral student in taking some courses that have a bearing on his research problem. It should be obligatory for a student to take some cognate and related subjects for study and examinations at a higher level so that he develops a depth in understanding the various dimensions of his research problem. It is likely that these subjects are inter-disciplinary in nature and, therefore, different Boards of Studies should provide for such cross-breeding of learning. Whatever may be his field of research, he should invariably clear a course on research designs, methodology and techniques before he is allowed to proceed in his research data collection. He should similarly clear courses in the mastery of English language as well as in one other European language like French, German or Russian in the case of scientific and technological subjects.

—It would be desirable to institute a M Phil or M. Litt degree as an intermediary degree between a Master's degree and a Ph. D degree and be awarded to a student who can not complete the Ph. D. research, (the M Phil or M Litt degree can be awarded after testing the candidate effectively through written tests and the viva-voce examination) and also to that student whose research thesis does not come up to a doctoral standard, and at the same time which is good enough to merit a degree higher than a Master's degree and also which is of such a nature that it cannot be revised for resubmission for the consideration of the award of the Ph D degree. Similarly, there should be a provision for post-doctoral or advanced research work leading to the degree of D. Litt and D. Sc But care should be taken to see that these degrees are awarded mainly on the basis of research work of recognized high grade merit, scrutinised by an international team of reputed experts of the highest grade.

Research work in Indian universities has suffered because there is little research-documentation. Research workers in the universities of one part of India hardly know what research work is in progress or has been completed in their area in universities located in other parts of the country. Because of a lack of inter-communication, quite frequently subjects are unnecessarily duplicated. And there is unfortunate resultant wastage of time, energy and money. The onus of the responsibility for preparing such research documentation falls on the Government of India and the U G C. The researches written in Indian languages should also be got translated into English and be made available to all relevant post-graduate departments and colleges.

Among the other measures which would eventually help in improving the quality of research in Indian universities is to prepare nationally a list of renowned scholars in Indian universities as well as in foreign universities and be made available to various Boards of Studies and Post-graduate Councils of Teaching and Research of Indian universities so that the exercise of malpractice by any teacher in recommending to the Boards of Studies an examiner whom he can influence has a little scope. It is alleged that in Indian universities, sometimes research guides of doctoral theses at times manage to cook Ph D.'s by manipulating to send the theses prepared under their guidance to their friends in other Indian and

foreign universities who very rarely reject them. In the case of teachers from Indian universities, this is sometimes on a reciprocal basis. These are hard strictures, but they are none-the-less true. This fact is crucial for those who are concerned with recommending and recognising examiners for Ph. D. thesis to remember. It cannot be brushed aside as something imaginary. This is a human weakness against which the attack and defence should come from teachers themselves. In the interest of higher standards of research of the doctoral standard, enough vigilance should be exercised so that this does not happen.

In many universities, there is a practice to refer a Ph. D. thesis to a third examiner, when the external examiner rejects it and the internal examiner does not agree to that evaluation and the verdict. Here, the rule for referring the thesis not accepted by an external examiner to another examiner should not be followed as a matter of routine. The Syndicate—the body to which such a report is presented—should not hesitate to reject the thesis altogether when the remarks of the external examiner expose the utter uselessness and weakness of a fundamental nature of the thesis, and a large scale plagiarism on the part of the student is also revealed. Because a Syndicate is not an academic body and, therefore, it is not competent to judge the validity of the report of an external examiner and, therefore, it has no other alternative but to refer it to a third referee is not an academically helpful situation always. There are a number of instances when theses rejected by one external examiner on account of grave defects have been approved in spite of these defects by the other examiner appointed by the Syndicate. When the report of one examiner suggests that the research work is of exceedingly poor quality, it should be right away rejected or, at the most, directed to be revised.

Research is of so paramount importance that universities should have some central, and in the case of affiliating universities also zonal, set-up to promote, co-ordinate and watch for the quality of research. The idea of a Dean for Student Welfare is accepted in university constitution. Similarly, there should also be a Dean for promotion, co-ordination and maintenance of standards of research work to be done in a university. This Dean himself should be a good researcher in his own field. But his primary function will be to draw out a phased plan of research developments in the university in consultation with different heads of the institutions

and heads of departments, and work with the university administration, State Governments, the UGC and other agencies like the Ford Foundation I C M R, industries, business etc, to secure the necessary financial support for the research projects. His major concern should be to give an incentive to the research work on the university campus, motivate talented and research-minded teachers, enthuse institutions and departments to undertake research projects, work for securing funds for research and to arrange for the publication of the findings of the research work. Research work in Indian universities suffers on account of insufficient or lack of incentive and assistance from the university administration, Government or the society.

In almost every university, there is usually a Post-graduate Council of Teaching and Research. Very often this body is dominated by administrators, senior heads and other vocal members. Much depends upon the leadership of the Vice-Chancellor who presides over the meetings of such a Council and the research interests of the vocal participating members. A Dean of Research, if his appointment can be thought of as a practical proposition, will be the best person to advise the Vice-Chancellor and also the Post-graduate Council on promoting planning and co-ordinating the research programme in the university as a whole and his office can serve as a clearing house to departments and institutions of the university on research funds, assistance, resources, etc for the approved research projects.

The Post-graduate Council of Teaching and Research in our universities is by and large, not able to function effectively, mostly because, as it is observed above, it is dominated by administrators who are the heads of institutions. In a research council the primary focus should be on the membership of researchers and not of administrators. Therefore, professors and other categories of teachers who have at their credit research input should have major representation. When administrators with little outlook on research are represented in a larger number on such Councils, financial considerations become crucial factors in the decision-making process of the Council. That is one reason why the research output even in our teaching universities is not adequate.

Within each institution or the department, for better promotion of research, there should be a set-up of a Research Seminar. This Seminar should meet regularly, say, every fortnight or every month.

At this Seminar, as many staff members as possible should be encouraged to present papers on whatever research work they are doing or planning to do or they have read about. This would create a very good climate in the institution for research work. There should be a similar Research Seminar for post-graduate students. All doctoral students, and even Master's Degree students writing dissertations, should be required to present their research designs and also to report the progress of their research work from time to time at this Seminar. The recognised post-graduate teachers of the department or departments and other interested staff members should also attend these seminar sessions. Actually, these sessions should be put on the weekly time-table. One staff member may be placed in charge of this Seminar so that he can prepare the programme of each weekly Seminar and inform the staff and students about it. The advantages of this Student Seminar are mainly three, viz., firstly, the research designs of each candidate will be considerably clarified and improved with suggestions and comments received from different staff members and students; secondly, the student will be forced to work regularly on his research problem because he has to report the progress of his work at the Seminar; and thirdly, both the post-graduate students as well as teachers will gain insight into different types of research problems, their difficulties and how to overcome them.

In order that the quality of research at the Master's and Ph.D. degree becomes really high, the department or the college should build up its resources in books of advanced learning in fields in which the institution intends to specialise for the research work, published research work, unpublished research dissertations, research abstracts, bibliographies on related subjects, preferably a pool of microfilms and other research tools, reports, original resource material, etc. It is necessary that one of the staff members who has aptitude and interest for research work should be assigned the responsibility of building up such research requisites and resources. He would guide the librarian in collecting, ordering out and cataloguing these resource materials.

CONCLUSION

It is a sordid fact that though higher education has increased very significantly during the first three Five-Year Plans, the expansion and development at post-graduate and research levels are somewhat slow and inadequate in terms of our national needs.

We are content to staff most of our key public offices, technical services, teaching positions in schools, offices of business and industrial executives with the holders of a graduate degree, while the real need is of advanced and specialised knowledge in depth. Though we turn out more Ph. D.'s in science, technology and medicine than before, still the output is small in education, commerce, business, industrial psychology, social work, public administration, fine arts and such other fields of vital importance.

Our post-graduate teaching, especially in Humanities and Social Sciences is mostly focused on spoon-feeding through lectures and note-dictation. Critical term papers and assignments followed by Seminars have not yet found a place in most of the post-graduate courses.

Post-graduate teaching in Indian universities suffers largely from a lack of clarity in goals, a lack of adequate resources—human, material and monetary, and lack of co-ordination. Unless the post-graduate departments are given freedom to frame their curricula and to revise them every year without much difficulty and delay, to try out different methods of imparting learning-experiences through group work and even to test and grade the students in light of the goals set in the beginning of the training, of the actual learning-experiences provided to students, in terms of creativity and originality demonstrated by the students and through using continuous and comprehensive objective procedures and tools of evaluation, there will not be really post-graduate work of high standard comparable to that of the best universities abroad.

As regards the post-graduate research work, there is little keenness on the part of students as well as teachers for quality research. There is public apathy towards investigations and research. Both the government and the society are not much concerned about giving financial and other support to research programmes in Indian universities. The industries and business in India are not helping universities in research by way of giving them funds to the extent that is done in other countries of the world. This has proved detrimental to the growth of the industries and business on the one hand, and of the universities on the other. In India, where there is a paucity of research equipment, incentive and funds, research has to be built up, as the second Vice-Chancellors' Conference in 1961 has observed, "around personalities who have made a name in particular fields."

Again, there is a lack of application of research for the improvement and enrichment of the life of the people. Most of the researches done in Indian universities remain unused on the shelves of the university libraries. Considerable proportion of these researches is of theoretical value. Research in Indian universities has not yet been harnessed adequately in the service of the welfare of the society. A developing country like India should have more of applied research.

There is also a lack of co-operative and team research on multi-disciplinary basis. The documentation of research work is still poor.

The remedy perhaps lies in creating separate administrative units for research in Indian universities. The suggestion made in this Section for creating a post of a Dean of Research in each university has relevance in this context. Research must be properly programmed, reviewed and evaluated periodically. Research work should be encouraged even among junior teachers, and there should be increased opportunity and possibilities in research work in each institution and department.

In brief, if we need well-prepared leadership for our society in future, the post-graduate teaching and research should be reorganised and revitalised by the Indian universities. Failing that, there is bound to be a grave crisis of intellectual leadership in India especially during this age when there is a fast "brain drain" caused in the developing countries by the technologically advanced nations.

THE SEMESTER SYSTEM,

Simply stated, a Semester is a period or a term of six months. In the U.S.A, U.K, Japan, Germany and many other countries the term 'semester' is used to denote each one of the two divisions of an academic year. An academic year can also have three divisions, each being called a Trimester.

But the present practice of dividing an academic year into two terms is not the same thing as the Semester System. The term 'Semester' or 'Trimester' implies something more than two or three divisions of an academic year. The Semester System implies, in the main, organization of semester-wise courses of studies and examinations. Much more than the traditional pattern of subjects in vogue in the Indian universities, the contents of these courses are more closely knit, are more varied and of inter-disciplinary nature, are organized better around student interests and needs, and are better structured around core, main and subsidiary content areas. The System also implies evaluation of students' work at examinations and sessional work. Semester-wise. Depending upon the size of the quantum of work included in a course and on the number of hours of study work in a week required of students, the semester-course carries certain hours of credit.

The Semester System has long been the pattern of curricular organization and evaluation in American universities. A number of British universities has also adopted some, if not all, of the features of the American Semester System. The system has not yet found a congenial climate in Indian universities, though about 20 per cent of universities have adopted the system in one form or the other with a varying degree of success. Half of these are teaching and residential universities and the other half are affiliating types. The I. I. Ts. and some of the Agricultural Universities,

too, are working according to the Semester System. The Baroda University was perhaps the first university to try out this innovation in its two new-unconventional types of Faculties, viz., those of Home Science and Social Work, some 20 years back. Later on, two more of its Faculties, those of Education and Psychology and of Technology and Engineering have switched on to this System. But the other universities like the Aligarh, Delhi and Meerut have adopted the system much more extensively and even in the Faculties of Liberal Arts, Science and Commerce. This development on the scene of higher education in India is significant as these three Faculties are usually big, and the organization of teaching and testing on the Semester basis poses several problems of staff, accommodation, preparing time-tables, providing increased library facilities, finance, etc. In this Section I would like to examine the emergent concept of the Semester System in India, what benefits are likely to accrue from the adoption of this system by Indian universities in regard to the improvement of standards and what obstacles and difficulties would be there which would need to be taken care of, if the innovation is to be made a success.

THE SEMESTER SYSTEM AS INTRODUCED IN INDIA

As referred to earlier in this Section the Semester System has been in operation in a few universities in India. But their number is too small when we view it against the total number of 100 and odd universities in India, including the deemed universities and degree giving higher institutions. The image of the Semester System that is emerging from those universities in India where it is practised bears the following features:

1. The division of an academic session into two halves and of the yearly courses into half-yearly short courses.
2. The assumption at Aligarh, Meerut, and at other places is that each Semester will have at least 100 working days excluding the examination period.
3. The syllabi are flexible and inter-disciplinary in nature at Aligarh, Meerut and Delhi. However, at Baroda the syllabi in a discipline are limited to that discipline only. That is to say, the courses in Home Science are taken by the students of the Departments of Home Science Faculty only. They are not inter-disciplinary inasmuch as they are not made use of by the students of other Faculties.

4. The courses are organised on the basis of the number of hours students are required to put in for their study. There are courses requiring from one hour to four hours study in a week on the part of students. The courses carry the number of hour credits on the basis of hours put in by students per week for study.
5. Each course is assigned some credits. Longer courses which involve four hour work in a week carry four credits, and smaller courses which require two hour study carry two credits. Each four credit course carries 100 marks while 2 credit course carries 50 marks.

The Credit System works in the following way. Let us take the example of the Credit System in the Aligarh Muslim University.

The University has set the total requirements of the Honours Courses at 120 credits or roughly 30 full courses or about (30×40) 1200 hours of study work spread over 3 years. Every student is required to offer at least 24 credits from courses of General and Compulsory Category, in which there is a considerable choice of courses available. Out of the remaining minimum of 96 credits, at least half of the courses carrying 48 credits lie in the subsidiary category, and the remaining 48 credits are assigned as the minimum in the area of the main subject.

6. A student earns credits in a course only if he passes in the prescribed sessional work and written examination for that course. If he fails or does not fulfil the requirements laid down for the course in regard to attendance, etc., he can take up the same course or a new course in the next Semester.
7. The examination in each course can be either wholly internal, or partially internal and partially external. In the Baroda University, the examination is mostly internal in the Faculties of Home Science, Education and Psychology, and Social Work, it is partly external consisting of university examination and partly internal based on sessional work in the Aligarh, Meerut and Delhi Universities.
8. The sessional work in the optional courses at the Aligarh Muslim University has the weightage of 40 per cent marks.

for subjects in which there is no practical examination and 30 per cent for subjects in which there is practical examination at the end.

Obligatory courses carry 50 per cent marks for sessional work and 50 per cent for practical examination at the end of the Semester.

9. In the Baroda University, in the Faculty of Education and Psychology, a comprehensive internal examination is held which has twice the weightage of sessional tests. A Viva-Voce test is prescribed to finalise the internal records of students. The Viva-Voce test is also provided in the Faculty of Social Work, but this test carries certain weightage in terms of credit points.
10. The Universities of Aligarh, Meerut and Delhi continue to use numerical marks and percentages in the evaluation of student achievement. In Baroda, the Faculties of Home Science, Education and Psychology, Social Work, and Fine Arts use grades and grade-points.
11. At the Aligarh Muslim University, every student is assigned to an Adviser on the American pattern. This Adviser helps the student to work out the most profitable series of courses for him.

Such is broadly the picture of the Semester System emerging from its present practice in some of the Indian universities.

ADVANTAGES OF THE SYSTEM

This new System has some distinct advantages if it is adopted and implemented after careful planning and with a good faith in the innovation.

One great advantage of this new system is the flexibility it achieves in the selection of courses by students. A student gets, to a varying degree depending upon the curricular facilities that can be provided in a college or university, freedom of choice of courses as against none or little in the existing system. Further, this flexibility makes possible a choice of courses by students according to their abilities, aptitude, interest and needs, which can contribute to the reduction of wastage in higher education in the form of large-scale failures. This flexibility also minimises the ills

of over-specialization—both at the undergraduate and post-graduate levels

The second significant advantage which is also a concomitant gain of the flexible curriculum of the Semester System pertains to the possibility of introducing courses on an inter-disciplinary basis. The Kothari Commission has laid a great stress on promoting inter-disciplinary studies, on new combinations of subjects, and on new methods of co-operation. It is for this reason the Commission has emphasized the establishment of post-graduate schools.

The third advantage lies in the improvement it does in student attendance which is at present irregular and indifferent. It assures a minimum number of contact-hours, as it lays down attendance requirements in terms of hours for a course rather than in terms of certain percentage of days attended.

The fourth advantage pertains to the regular study habits it builds up in students. As the student is continuously being evaluated, he is placed in a situation in which he has no other alternative but to study regularly and study hard. This may help in maintaining or even promoting higher standards of learning.

The fifth advantage is that it is more suited to the present level of students in composition as well as in motivation. The experiences of the British pattern of curricular organization and examination are that "the educational needs of a selected and highly motivated group are better served by long courses and examinations at greater intervals. If, however, the group is heterogeneous—many of them will study mainly for earning a degree or if the nature of courses is such that they need breaking into smaller units, the fragmented courses and frequent examinations provide the answer".*

The sixth advantage, which is particularly claimed by the Aligarh Muslim University in its Handbook is that in the Semester-wise examinations, a student who fails in a course has an opportunity either to repeat the course in the next Semester or take another course in its place thereby saving his precious year. This works significantly in reducing drop-outs at the higher education stage. Working students or students with inadequate means or even students with weaker scholastic equipment have an opportunity in

* R. K. Singh Semester System at the Meerut University. A Paper presented at the Aligarh Muslim University Symposium December 15-17, 1969

this system to proceed at their own pace permitted either by their resources or ability.

The seventh advantage is that it can be adopted in teaching and residential universities as well as in the affiliating universities. The Baroda, the Aligarh, the I. I. Ts. and the Agricultural Universities where the system is wholly or partially introduced are teaching institutions of higher learning, whereas the Delhi and Meerut Universities are affiliating universities. The System can be introduced with internal evaluation and with the grade-credit system as its internal part; it can also be used with the system of partial or full external examinations and with 50-point or 100-point numerical mark system.

The eighth advantage that it has is that it facilitates and lends better edge to organize Summer Semesters. In the current conventional system, the long summer vacation is almost an academic waste. The Semester System may provide a summer session as it is done in the Meerut University. At Meerut, the most popular and the most difficult courses are selected for Summer Sessions to enable students to earn Advance Credit in order that they are able to give more time to Honours Courses and to make up for failures in one or more courses in the preceding Semester examination. Summer Courses may be taken even by students who have not acquired the minimum pre-requisite qualifications for admission. A student who has appeared at the Intermediate or the Bachelor of Arts Examination and is waiting for the announcement of his result can take a Summer Course to earn advance credits. If he passes the examination concerned as well as the Summer Course, he gets credit for the latter. The Summer Courses, if they are properly dovetailed with Semester Courses, would enable the abler students to earn a Bachelor's and Master's Degrees simultaneously in less than the prescribed time.

These are some of the distinct advantages of the Semester System. But the system is difficult to implement. It may suffer from some of the inadequacies inherent in the present situation. And above all, it requires faith to work it out at first as an experimental measure and to change and adapt it in light of the accumulated experiences. I will briefly refer to some of the difficulties as pointed out by those who have worked in the system and then consider how they can be dealt with in order to ensure a fair measure of success for the system.

DIFFICULTIES AND POSSIBLE SOLUTIONS

(1) Redevelopment of Courses

One difficulty that is very often pointed out relates to recasting and reorienting the syllabi in such a manner that an inter-disciplinary, well-balanced and well-co-ordinated system of teaching-learning emerges. This task cannot be performed under the present constitution and functioning of our Boards of Studies and Faculties. It would need either development or redevelopment or editing of courses at meetings of groups of inter-disciplinary in nature, under the guidance of some experts in curriculum development. At present this is the weakest aspect of the Semester System in those universities where it is adopted.

Another way of tackling this problem is to restrict the courses to each discipline, and leave the department to invite collaborations from other allied departments or adopt the Inter-Disciplinary Approach in teaching instead of organising courses on an inter-disciplinary basis. This is what is largely done at Baroda, and Meerut.

(2) Inter-disciplinary Time Tables

The second great difficulty which takes away one crucial advantage of the Semester System is the framing of a flexible time table cutting across the boundaries of a number of courses in different disciplines. The framing of inter-disciplinary time tables is indeed time-consuming. Its success depends upon willing and firm co-operation among different inter-disciplinary departments and good relationship free from jealousy and antagonism. Frequent student-strikes and strife in one or more departments would affect the working in other departments.

This difficulty indeed is there and it does prove crucial to the success of the Semester System in regard to the organisation of inter-disciplinary courses. But it is not something that is insurmountable.

A university can assign the responsibility of directing and co-ordinating the work of the preparation of time-table on the inter-disciplinary basis to a senior teacher. He may be a full-time Co-ordinator or a part-time one. In the latter case, he should be rewarded for this extra work by giving him some remuneration by way of allowance. This Co-ordinator works with the Heads of different departments on the university campus or

of local constituent colleges and develops the time-table of inter-disciplinary courses well in advance, so that it can be printed and placed in the hands of the intending students a little before the academic programme for a new academic year or a Semester begins. The Co-ordinator should have an office with secretarial help and with the facility of a telephone. He, with the help of his office, should be in a position to make adjustments in the Time Table if unforeseen circumstances warrant them.

There is also another way. A university or a college can limit inter-disciplinary courses to one Faculty or a college. In that case the framing of an inter-departmental time-table offering flexible courses within a Faculty or among different departments of a college should not be difficult.

(3) The Staff-Student Ratio

At the Aligarh Muslim University, where, at a Symposium on Higher Education, the Semester System was discussed in December 1969, it was stressed by some participants that the Semester System would need the recruitment of more teachers, for which the Indian universities have at present no money.

Certainly more staff would be needed if a fairly good number of inter-disciplinary courses are offered. If courses are made short and sharply focused, it would again necessitate increase in staff.

More and varied courses would mean more classrooms for lectures, seminars and even for practicals.

The recruitment of additional staff and expansion of classroom facilities in a Faculty or a college would certainly be a point if more courses are to be instituted. But the recruitment of teachers and the need of more classrooms should not be an insurmountable hurdle. What an institution should do is to examine the work-load pattern of its teachers, and make the assignment of teaching, practical work guidance, etc. in such a way that wastage may be avoided and reasonably some more time of teachers can be economised which could be utilised for teaching new courses. New recruitment for courses that are new and for which competence is not available in the existing staff will have to be made. There is no escape from it. But it should be possible for the U. G. C. to support such additional staff through its grant-in-aid for developmental programmes.

If an institution decides to make its time-table from morning to late evening, the question of shortage of classrooms and

laboratory can be considerably made up. As such there is at present under-utilization of the resources of institutes of higher education.

(4) Inter-University Mobility

It is sometimes held that the 100 and odd universities, deemed universities and institutes of higher education in the country are working under a different system. "The Semester System and the new courses, however progressive, advantageous, purposeful or perfect they might be, are likely to cause difficulties in respect of inter-university mobility. The adjustment of evaluation procedures of a university which adopts such a system with other centres of learning, which have not so far given it a place in their academic schemes, may cause not a little confusion and even headaches."^{*}

The question of the difficulty of the inter-university mobility is more theoretical than real. Compared to American and British universities, the inter-university mobility in India is very little. Once, the Semester System is begun in different universities, some procedures of determining equivalence will be worked out by the universities themselves depending upon the nature of the cases of migration. And even if a few universities switch on to the Semester System and the large bulk of them prefer to continue the traditional pattern, a student from a traditional pattern of courses and evaluation would migrate to such a convenient university where a similar pattern operates. At the stage of higher education, a student cannot expect that an appropriate institution of learning will be in his own home town.

(5) Student Attendance

In order that the Semester System achieves its objectives of keeping the student community busy all around the year, it is necessary to lay down attendance requirements. The current practices in many universities of laying down an over-all percentage of attendance, would need a change. It would be advisable to lay down attendance requirements in terms of hours for each course. The Conference of the Vice-Chancellors of the U. P. Universities decided in June 1968 that only those students who attended at least 75 per cent of the minimum number of periods presented in each Semester might be permitted to appear in the

* S. A. H. Haqqi : *The Semester System : Some Reflections*, Aligarh Muslim University Symposium on Higher Education, December 1969.

examination. For genuine reasons, relaxation in attendance upto a maximum of five per cent might be allowed with the approval of the Vice-Chancellor.

If the argument is accepted that the insistence of 75 or 80 per cent of attendance on the part of the students is in the best interest of maintaining standards of higher education, the arrangement for keeping records of attendance on a full-proof basis becomes a real problem. Staff members do not relish in calling the roll when the class is big, as it takes away much of their time. If a student is detained for inadequate attendance, it becomes really difficult to prove the case unless very careful records of attendance are kept. It is necessary to obtain the students' signatures for attending each course. A student leader for every 25 students may be placed in the charge of circulating the attendance sheets amongst students for their signatures. This may later on but on the same day be passed on by the student leaders to the teacher of the course who maintains these records of attendance.

(6) Internal Evaluation

Generally speaking, the Semester System implies internal evaluation also. It is often maintained that though internal evaluation is sound on paper, yet it does not work in practice, especially in affiliating universities, each having 50 or more colleges attached to it. There are quite a large number of educators including university teachers who do not favour and are not ready for the adoption of the cent per cent internal evaluation system.

The Semester System and the System of Internal Assessment are concomitant no doubt, but are not a case of internal relationship. It is possible to have a Semester System and external examination as it is done in the Meerut University. The difficulty in regard to evaluation can be obviated by allowing those universities and within a university those Faculties or colleges which are not ready for all internal evaluation to adopt a system of evaluation which is partially internal and partially external.

There are three ways of doing this.

One way is to assign a fairly reasonable 30 to 50 per cent weightage to internal evaluation through periodical tests, practical assignments, term papers, participation in Seminars, etc. When

this internal evaluation is done by a number of teachers, some arrangement for moderation through developing evaluative criteria and specifications or converting the marks given by different teachers to standard scores by using simple statistical formulae may be adopted with advantage, which would help in reducing the degree of subjectiveness of internal assessment.

The second way is to do away with the external examination but to retain the external examiners. This is what is being done at present by many universities in the U K. The assessment of students' work may be entrusted internally to the institution's teachers, but outside examiners are appointed to examine the validity of this assessment by checking up sampled cases of distinction, first classes, second classes, border line second classes and failures. This should work in our colleges and universities.

A third way of doing is by following the practice of the Meerut University. The examination papers are set by external examiners, but the answer-scripts are assessed internally by the university teachers. The Internal Examiners are assembled at different Evaluation Centres, (which are 7 for 40,000 students) to examine the scripts during specific hours of the day under the over-all direction and guidance of the Head or Deputy Head Examiner (who is a senior university teacher)

(7) An Over-load of Tests

The Semester System does 'carry full or partial provision for internal evaluation of the sessional work by teachers themselves. When the number of courses are very many, the internal sessional tests become a continuous load on the minds of the students, and because of the tension created by tests, they cannot really enjoy their student life. There is another difficulty, too. As these internal tests are set by teachers in their regular periods, it happens in actual practice that many tests are set on one single day. At times, students are required to take four tests in a day, which is very much tiring for them. When there are tests, the students are found absenting themselves from attending other periods on that day, as they read for the tests sheltering themselves in corridors and under the trees of the college lawns.

This difficulty seems to be real. But it can be improved upon by arranging to hold tests on only Saturday and that, too, not more than two tests on a single Saturday. If the time-table of tests for a month is formulated and if it is announced sufficiently

early, it will not create tension on students and tests will not be a heavy load on them.

CONCLUSION

These are some of the major criticisms made by Indian educators against the Semester System. However, the advantages of the System outweigh the short-comings and difficulties. I believe, Indian universities should try out this innovation with faith on an experimental basis, and in the light of what experience they get, adopt the System to suit their resources and means.

I would like to conclude this Section by focussing some of the crucial gains that are likely to follow the adoption of this system in our universities.

The Semester System may result in a distinct improvement of the curricular organisation and evaluation in vogue at present. Because of short and coherent subject-matter, the Semester Courses are likely to be more conveniently combined to facilitate interdisciplinary studies. It would make it possible to co-ordinate studies between different departments, at graduate and post-graduate levels. Further, the System would enable teachers to cover the subject matter in a more logical and non-repetitive manner. It would allow students a choice of subjects according to their ability, aptitude, interests and needs which would help in reducing wastage. One other significant advantage will be that it would allow the student to progress rapidly towards fulfilling the requirements of the degree. It would reduce the evils of a single final examination. It would pave a way for more frequent changes in courses aimed at their modernization and enrichment. Its greatest virtue will be flexibility, better curriculum, better focused teaching and learning, and a fairer and more just deal to students in examinations. And all of these would mean better curriculum, better learning, more student pre-occupation and less student unrest.

SCIENCE AND HIGHER EDUCATION IN INDIA

No field of knowledge in recent years has exploded so fast, has become so complex and enriched and has demonstrated its value to be an instrument of development of a country's human and material resources and of its social regeneration than the field of higher scientific knowledge and research. Those countries which are in the forefront among the highly industrialised nations with a very high standard of living have demonstrated beyond any doubt that a well developed, adequate and sound basis of higher education in science is a pre-requisite for rapid, vast and varied economical and social development. The lessons of the developing and economically backward countries also point out to the same conclusion, namely, that absence of high priority and half-hearted emphasis on science education act as serious impediments to national growth and development.

It is true that after the attainment of independence, and in the three Five-Year Plans' period, increasingly greater attention than before has been given to science education both at the school and university stage. Whereas in 1882, the number of graduates in all subjects was 266, in 1950 the number of science graduates alone was 9,628. It has increased to about 40,000 now. However, the average compound rate of growth per year is only 9.6 per cent. Similarly, we have improved very significantly in the output of M. Sc.'s, the average compound rate of growth per year in case of M. Sc. degree holders has been 13.6 per cent. Around 600 persons were awarded Doctorate degrees in Science and Technology in 1968. This means that in the field of higher science education we have made very significant strides. However, what has been achieved is far less than what is needed. In comparison with countries like the U.S.A. and U.S.S.R., our current output of the M.Sc.'s and the

Ph.D.'s in science is very small. In 1966, in the U.S.A. the output of M.Sc.'s was 6,600; the present output in that country is estimated to be around 13,000. The U.S.S.R. has also similar spectacular achievement in the output of Masters and Doctorate holders in Science and Technology. It means that to meet the demands of our developing national economy and to use education as a process of modernising the Indian society and a tool of social change, the enrolment in science and mathematics, specially in post-graduate classes would need to be expanded several folds in the next two decades.

The Kothari Education Commission has given anticipated statistics of the growth of enrolment desired in science courses. For instance, it has stated that the enrolment in science subjects like chemistry, mathematics, physics, botany, zoology, and geology would need to be expanded ten times to the present student strength in them. The Commission has stressed the need for stepping up the annual rate of increase of about 15 per cent in the enrolment in science subjects.

As a first step the present proportion of students taking science courses in the university total enrolment should be increased. In 1961-62 against a top heavy percentage of 59.8 students, enrolled in the Faculties of Arts of Indian Universities, the enrolment in the Faculties of Science was only 29.2 per cent. In 1966, the proportion of science students did improve and rose to 37.7 per cent; still however, the enrolment in the science faculties is very low and inadequate. In the U. K., the students undergoing post-graduate education in pure and applied sciences in 1961-62 was respectively 46 and 22 per cent. In India only 22 per cent of post-graduate students were studying science subjects; we must change this picture if we have to realise real benefits from science education.

Along with the change in the enrolment policy in regard to admission to science subjects, another reform will have to be effected as early as possible. There is at present considerable regional imbalance in science education and in technology. This imbalance is also present at district levels in individual States. For instance, a study done in 1965 revealed that of the total university enrolment in individual States, the student strength in science subjects was as high as 47% in the three southern States of Andhra, Kerala and Madras. In States like Gujarat, M. P., Maharashtra, Orissa, U. P., and Delhi, the enrolment in science was between 22 and

32 per cents Assam and West Bengal had even less than 20 per cent. It should be remembered that this kind of regional imbalance in facilities and programmes of higher science education seriously affects the pace of industrial development in different States which in turn hampers the growth of national economy. Therefore a top priority must be accorded in the programmes of development of science education to the correction of such regional imbalances.

The expansion of science education at the university stage is likely to cause serious difficulties to educational planners and administrators. It is imperative that rapid expansion of enrolment and output of post-graduate degree holders should be stepped up through a firm programme of expanding science education but the real challenge lies in achieving this expansion without diluting the standards. This is going to be no easy task. It would require reorientation of the fiscal policy in higher education, careful planning and courageous and imaginative action on the part of all those who are concerned with the administration and teaching. Much of the success of the efforts would depend upon the preparedness of Government to provide massive financial support for the development of science education. It would also need more understanding and imaginative policy in the release of foreign exchange for construction and equipping of science laboratories. A more meaningful and productive collaboration between institutions of higher education, national laboratories and industrial and government scientific establishments as well as organisations would prove crucial.

Apart from modernising the old and adequately equipping the new laboratories the requirement and training of teaching staff for higher institutes of science education would pose a challenge to administrators. The quality of teachers of science subjects will have to be maintained at a higher level. The size of recruitment, too, will cause a serious problem as the recruitment of new teachers every year will have to be at the rate of some 20 per cent of the current strength. This is what the Kothari Commission has estimated in regard to the yearly recruitment of new teachers.

Modernisation of curricular subjects in science is going to be an equally tough challenge. The university departments of science and colleges teaching science subjects will have to be very vigilant about keeping their courses up-to-date. This is because of the terrific pace of development that is taking place in the field of science.

How much onerous and difficult is going to be the task of Boards of Studies in Science subjects and of heads of departments in the field can be realised from the following observation by an eminent scientist which beautifully summarizes the startling fact of rapid growth of scientific knowledge: "A scientific paper is often out of date by the time it is in print; a book is out of date before a student has completed the courses; a graduate is obsolescent on the day of his graduation; and a research equipment is out of fashion by the time it is produced". Unless teachers of science keep themselves constantly and closely in touch with various and varied developments that are taking place in the domain of science, they will find themselves out of place and out of date in their own institutions and they will have to face adverse criticism from students and the society.

In the end, India would stand as economically strong and as modernised society to the extent to which it succeeds in placing science education in her institutions of higher learning on a sound and richer basis. It is no wonder, therefore, that a National Education Commission like the Kothari Commission should base its basic philosophy, approach and structure of the reconstruction of the Indian education in deep conviction that, "The progress, welfare and security of the Nation depend critically on a rapid, planned and sustained growth in the quality and extent of education and research in science and technology."

POPULATION EDUCATION THROUGH COLLEGE CURRICULA

One of the most crucial programmes of the day demanding almost a war-like urgency at present is the campaign for family planning.

The success of the campaign is so vital that on it would depend the future quality of the life of individual Indian families and of the nation. It is so imperative that the idea and the practices of family planning are taken up with almost religious fervour and faith by each couple in each home in the country.

Several agencies, both government and private, are actively working for making the idea of restricting the number of children per family, to two or three. And their efforts are reaping fruits. The movement of family planning is succeeding. But there is yet a long way to go. The movement is to be generalised in all parts of the country, and at all the levels of the society. The concept of the planned family is to be integrally woven into the fabric of thinking and attitude of every young man and woman and of the emotional pattern and the value system of every adult.

USE OF EDUCATIONAL AGENCIES

What is now necessary is to call upon the formal agencies of schools and colleges to help in injecting the idea of restricted family into the growing minds of adolescents at the school stage and of the youths at the college stage. These agencies are capable of serving as effective media for building up the mind of the youth wholesomely towards the small size family. The population between the ages 13 and 20 forms an important sector so far as family education is concerned. The reproductive behaviour of this group when it reaches maturity will be of central importance in the national effort to control the population explosion in the country.

But what is necessary for the population of this age group is not the knowledge of ways and means of limiting the size of the family but developing in them a kind of awareness of the fact that unduly large families constitute serious drain on limited resources of Indian families and a sensitivity to the fact that small families mean better upbringing, more opportunity for better education for children, better standards of living, etc.

It is not correct to presume that the problem of family planning is of little concern to the adolescents and to the young who are pre-occupied with other more immediate interests. The fear that is sometimes expressed that attention to any area of knowledge closely associated with family planning among the immature might place in jeopardy the basic social values pertaining to sex and family life is exaggerated. No such ill-effects are likely to occur.

What the youth would know will be not about 'contraceptives or the functioning of sex organs, but will be in the form of the appreciation of the advantages that would accrue from small-size families. There will not be a separate subject of family education, but the family education will be imparted through developing units of teaching in languages, mathematics, biology, physiology and hygiene and social studies. There are a number of significant aspects of population and family life which are within the legitimate domain of the school and college system.

AT THE COLLEGE LEVEL

In the Preparatory and First Year Classes, some specific units of instruction can be planned. They may form the part of the General Education Programme at the under-graduate stage. Dr. Solan R. Wayland of Columbia University suggests the following subject areas that can be dealt with through instruction in colleges :

Basic instruction in population dynamics, and development of the process of human reproduction. Science curriculum, health education, and domestic science classes may form a natural setting for such instruction.

Understanding of health problems, associated with child-bearing, and several well-established clinical findings could be examined here concerning the health risks of morbidity and morality of

the mother associated with pregnancy of the young mother and the older mother short intervals between pregnancies and high parity This should interest both young men and women

In addition to the health values, consideration needs to be given to the economic and social consequences for a family of the presence of a number of children

Appreciation of the significance of population characteristics and policies for social and economic development can also be taken up in the preparatory as well as graduate classes

It is important that our youths develop a good familiarity with the population policies and family planning programme of our own country through such units of instruction

USE OF PROGRAMMED LEARNING IN UNDER-GRADUATE CLASSES

Certain facts and consequences of mounting enrolment in preparatory and other under-graduate classes have to be faced realistically.

It is true that there are more students in college classes than can normally be expected of college lecturers to handle effectively.

It is also true that the new recruitment of tutors and assistant lecturers that is being made every year is more a physical than an academic provision. Most of these new junior teachers do not have the maturity, skills, confidence, attitude and interest to be able to understand the minds of the youths and impart instruction that would be satisfying, interesting and intelligible to them.

It is no wonder that the rate of failures and drop-outs is high at the college stage. This is a reality. That this situation will change in a near future is a vain hope. College and university administrators know this hard fact very well. And yet, very little serious thinking is being done to combat this situation. No new approaches to teaching and learning that would ensure effective learning and prevent the standards of under-graduate teaching from further deterioration are being tried out.

The University Grants Commission, Advanced Centres of Education, the National Council of Educational Research and Training and Departments of Education of leading universities in the country should take a lead and provide a dynamic leadership to break-down the prevailing apathy and inertia in teaching at the under-graduate stage. They should continually search for keys to more valid learning-experiences and aids to more effective teaching.

Programmed learning is an exciting though controversial innovation in the world of teaching. It is worthwhile to consider

some of the challenges and promises of this new teaching approach and at the under-graduate level, at least in some of the subjects to start with.

PROGRAMMED LEARNING

Programmed learning is a device of teaching and learning. Its purpose can be simply stated to teach rapidly, thoroughly and expeditiously a large part of what we now teach slowly, incompletely and with waste effort on the part of both the student and the teacher.

A good programmed learning has several important features. It has programme-frames on different units of a subject which are a kind of fill-in the blank exercises. These programme-frames are carefully prepared in consultation with subject-experts educational psychologists and social scientists. Each programme-frame is in the form of a small step or an exercise. Different frames constitute well-graded sequential steps so that the student passing on from one frame to the other has his learning proceeding on sound lines.

All frames are previously tried out and validated so that not less than 90 per cent of students would succeed in making correct responses. Students are spared the agony of failures and frustration in their learning.

In the programmed frames of learning, at each step the student can check-up whether his response is correct or false. The immediate results to his efforts at learning are very much satisfying to him. There is a provision for self-correction which also gives him previous mental satisfaction.

It should be noted that human behaviour is remarkably influenced by small results. In the programmed frames right responses are more of a possibility. Describing something with the right word or making right responses is often reinforcing. Other reinforcements are to be found in moving forward after completing one stage of activity. The merit of the programmed frames is their reinforcement. The new material to be learned is broken up into small steps. As success is assured a consistent gain in reinforcement is guaranteed.

SOME DISTINCT GAINS

The use of the device of programmed learning in under-graduate classes can ensure some distinct gains.

A large number of students will not be a problem, as it will be easier to print as many copies of the programme as needed.

It is a salutary thing to guarantee a correct response at every step in the presentation of a subject. The rate of learning will be faster. The understanding will be more in depth. Standards of college education will be upgraded.

Teachers of doubtful subject-competence and teaching-skills will not pose challenges and provide continuous headaches to college administrators.

The student will be taught something more than the subject matter. He will be challenged and taught to 'think'.

Individual differences among students will be taken care of. Talented students can be provided with more challenging learning-frames to respond to. Similarly, the below-average students would be provided programmes that they can work out at their own level of competence and at their own speed.

Many different types of teaching-learning frames will undoubtedly be needed. These will be prepared by experts. But they will not eliminate the need for teachers or reduce their status. On the contrary, they will enable the teacher to save time and labour for creative classroom functions.

Grades or marks will have a new meaning, signifying the amount of material the student has covered in a given time.

It is worth considering the use of the device of programmed text and learning in under-graduate classes !

GOOD TEACHING IN UNIVERSITIES : A CONCEPT

Good teaching is crucial at any stage of instruction. It is all the more so in higher education, as it is intended to train leadership of the top category. Good teaching alone can hold on the top heavy structure of higher education which is shaking under the weight of the mounting enrolment. Good teaching holds the key to the prevention of standards of colleges from further deterioration. With good teaching, almost any deficiency in curriculum, organization and administration can be made up.

WHAT IS GOOD TEACHING ?

But what is good teaching ? Good teaching is interpreted by students, college administrators and even by college teachers in so many ways that a real definition of good teaching seems to be elusive.

Students have their own angle on the concept of good teaching. The teaching should be useful to them in the examination. For instance, a student explained his concept of good teaching thus : "Prof. A's teaching is good. He talks so slowly, that we are able to take down his lectures almost verbatim. As he uses simple language, we have no difficulty in understanding his lectures. Oh, yes, most of the questions are from his lecture notes."

Another student provided a further angle to the concept of good teaching. "We like Prof. B's teaching. He is witty and full of jokes. His class is never a bore."

"All of us like Prof. C's teaching", a third aspect of good teaching emerged in a talk with students. "He has a wonderful delivery. He speaks beautiful English. He can keep the class spell-bound".

A college administrator puts his concept of good teaching in this way. "Well, Shri D is a good teacher. There are no disturbances in his class. He is popular with the students. The results in his subject are also pretty good."

A college teacher enumerated the following ingredients of good teaching. "Subject mastery, good preparation, clear presentation, interested students and job satisfaction".

The concept of good teaching which is revealed in the above sampled observations, is not such as to help in maintaining and upgrading college and university standards. The emergent concept is confused, superfluous, narrow and it even lacks a focus.

It is no doubt true that teaching should be clear and interesting. It should be well comprehended by students. It should be useful to the students. But to enable the students to pass the university examinations can never be its sole and ultimate goal. Good class order is desirable. It facilitates learning but keeping the class spell-bound is not always good teaching. Good teaching should result in effective learning. A teacher has not taught unless the students have learnt. And students do not always learn by listening to witty and fluent lectures. Even lectures well saturated with good subject matter are ineffective in the case of a large number of students in the class—they become dead weight. Spoon-feeding done in whatever effective way is no good teaching. There is a lot of truth in the maxim—a good teacher is one who does not teach. The focus on good teaching should be on making students active participants in the learning process.

TEACHING IN COLLEGES

Most of the teaching in college classrooms is topic-centred. The concentration is on teaching the topics of the prescribed syllabus. There is very little pre-thinking of outcomes in the teaching of any subject. Instructional objectives are seldom defined. What understandings, abilities, skills, interests, attitudes, etc. can be built up in students through the course are rarely thought about by college teachers. If skills and competence develop in students, they are due to their own intelligence, efforts or through happy accidents.

In the absence of the pre-formulation of instructional objectives of a course or a subject by the college teachers, the teaching degenerates into a mechanical process of pumping in information which is wrongly equated with knowledge. At the best, a college student becomes a carrier of information and that, too, often in an undigested form.

Very few college teachers do instructional planning in terms of the outcomes they desire to bring about in students. Very few of them have schemes of units, defining the range and scope of each

METHODS OF TEACHING : THE LECTURE, THE TUTORIAL AND THE SEMINAR

With the terrific rate of expansion of under-graduate education, the classroom, which is the main centre of teaching-learning in universities and colleges, is very often crowded, at some places even over-crowded. As a matter of fact, there are more students in the classroom than what a teacher can normally handle. In certain subjects the strength of the class goes beyond a hundred. It needs a good, competent and skilful teacher to handle the class well so that instruction proceeds without noise and interruption.

THE LECTURE-METHOD

In Indian universities, the method of imparting instruction by the mass lecture-method is very common. It has been in operation as a sole method of instruction for long enough to become deeply rooted. It is perhaps the only method used even now in many colleges. Many other improved methods of teaching-learning are suggested by several expert Committees and Commissions, but it has not been yet possible to dethrone the lecture-method from its high pedestal. Three reasons can be attributed to this, viz. the fact of a large number of students sitting in the class, a high proportion of students per teacher and the ignorance of the college teacher about the use of any other method but the lecture-method. At several places, the lecture-method has deteriorated into the dictation of notes. This happens not only at the under-graduate level, but quite often it happens at the post-graduate level also.

The defects of the lecture-method are very apparent and are well known. Unless the teacher is learned, conscientious and skilful, the lectures hardly serve the purpose for which they are delivered. Students feel interested in lectures if the teacher has fluency, if he uses a variety of illustrative materials, if he can make an art

and judicious use of the black-board, if he uses simple and familiar language, if he makes his presentation suitable to the level of the class, if he punctuates his exposition by stimulating questions and jots down important points on the black board, if he recapitulates the points dealt by him in his discourse and leaves some time at the end of his lecture for the questions-answers by students. The Robbins Committee of England on Higher Education, too, recognises the virtue of the lecture-method if some conditions regarding their being well planned and effectively delivered and used are met. It has said "We think that a well planned and well-delivered series of lectures can give a sense of proportion and emphasis lacking in tutorial discussions and seminars where teaching, in following where the argument leads, may often stray into by-ways. It should bring to students modifications of what they find in their text-books, suggest wider reading, and, when given by lecturers in touch with recent developments, be a source of stimulus and inspiration" (Report, p 187)

Thus, the lecture has its usefulness and a justified place among the methods of teaching that are used in under-graduate classes. Its claim for retaining its place as a method of higher learning has risen somewhat high on account of the rapid growth in knowledge in a short time. The lecture is perhaps the most economical method of disseminating the expanding quantum of knowledge in a short time. A Seminar paper presented at the Leeds University, U K, develops a new justification for the method, and it imparts a new focus to the lecture-method for use in colleges. "The Lecturer's selection of material may save a student many hours of search in a great volume of books. It is often most instructive for a student to listen to an argument in the process of development, and such a treatment may bring a topic for life when otherwise it would remain embalmed in a text-book. In a lecture all kinds of side-references, illustrations and glosses can make a topic a living and moving growth. Above all where the topic under consideration has an importance not so much because of its factual content as because its study provides a student with a new interest or a new relationship to the corpus of knowledge then the lecture is the best means of communication between teacher and pupil."

Another educationist, an Indian justifies the lecture method also in the context of the fast growing body of knowledge which would leave the student bewildered and confused, unless he gets

from the lectures a genuinely synoptic view of the subject and with its help, he develops a proper frame of mind to do properly focused and discriminating study.

"With the explosion of knowledge in the last decade or two and the phenomenal splintering of academic disciplines, each with its own emphasis on knowing more and more about less and less, and the consequent need of acquiring by the student a much greater body of basic information matched by his manifest inability to gather this basic equipment through a detailed, diligent and discriminating study at first hand of all the source books, the straight lecture, aimed at providing the academic type with a comprehensive body of facts on the subject, selected and structured so as to provide an insight into the subject, has become more important than ever."

These ideas represent the bright sides of the lecture-method at its best. But in most of the lectures that are delivered in colleges and universities, the gains claimed in the above excerpts very seldom occur. These lectures are stereotyped, bookish, often delivered in a mechanical way without little effort on the part of the lecturer to establish rapport with the students, and they hardly attempt to provide the students an insight into the subject.

When students do not receive new ideas, it is understandable that they cannot respond to them. It is said that the study from lectures should be supplemented by individual students by library work. This happens in the case of only a few students who are intellectually stimulated and who have sufficient knowledge of English to be able to understand class lectures, text-books and reference books. For the great majority of students, especially the under-graduate students, lectures constitute the only source of learning and what is received through this source is often unorganised, undigested and unusable load of factual knowledge.

TUTORIALS

As a corrective to the ills of the lecture-method, tutorials and seminars are suggested. Tutorials have long been talked of. Seminars have figured on the scene in the course of the last decade and a half.

The examples of the Oxford University and the Cambridge University are quoted when tutorial instruction is stressed. The term

'tutorial' perhaps has acquired its meaning from certain traditions and practices at Oxford and Cambridge before the printing was invented. Tutorial denotes that a student goes to a teacher, at least once a week. This may be for counselling on personal problems, guidance on some felt needs, or for instruction—solving his difficulties in studies. The tradition in tutorial thus started with individual students meeting the teacher in his cabin or in the class or at his residence for counselling or guidance or instruction. At the Cambridge University, the tutorial came to be designated as 'supervision', where students go to their teachers in pairs. Ancient Indian universities practised tutorials in this sense long before the Oxford and Cambridge universities were established.

With the growing student enrolment, the tutorial practice at the Oxford and Cambridge underwent changes. Tutorials began to consist of more than one student. University teachers began meeting students in small groups to impart instruction. Individual conferences for counselling and guidance must have also continued. But tutorials began to mean instruction in small groups. That is the meaning that has ultimately stuck to the term 'tutorials'.

Tutorial work in colleges and university departments has begun to be advocated in India since the twenties. But little progress seems to have been made in this respect. In 1949, the Radhakrishnan Commission described the situation in these words: "In India tutorial work is done only at very few colleges and universities, only at some places are the tutorial groups of a manageable size, while at others as many as twenty or twenty-five students form a group—this is really not a tutorial but merely another lecture-class in which the tutorial loses its essential character. We do not think tutorials can be employed successfully in groups of more than six students." (Report, p. 107) Even twenty-years after the Radhakrishnan Commission made the above observations, the situation in regard to the tutorials has remained more or less the same.

Some colleges and university departments have made efforts to introduce tutorials for their students. Some of them have invented a new meaning for the term 'tutorial'. They use the term to denote 'tests' or 'periodical examinations' involving written exercises which are to be assessed by tutors or junior lecturers. Some provide 'tutorials' on their time-tables when each teacher meets a group ranging from 10 to 25, depending upon the size of the

It is a matter of regret that the under-graduates do hardly any writing work during the year besides writing the examination answer-papers, and where some written work is done by students, they get too little criticism of what they submit. The setting of regular and systematic written work to under-graduates and the offering of detailed criticism of what they write will do a world of good to them. It would further provide the student "a focus of attention in arranging his studies." But there are certain risks also about this method. Firstly, unless the teacher is vigilant and searching, the written assignments would be exercises in copying down from books; the student weak in the knowledge of English will be put to a lot of tension; unless strict regularity in the submission of written assignments and attendance at the tutorial is insisted upon, firmly and resolutely by the tutor, there will be a number of students who will try to dodge this obligation under one excuse or the other; as Sir James Mountford has said, "The shy or lackadaisical student may shelter behind his more forthcoming companions and so derive little benefit"; the difficulty of the tongue-tied students will be there; there is a good proportion of students in college classes—girls are greater in number in this category, who can hardly be stimulated to speak out their thoughts.

The tutorial, if well conducted so that not only the tutor but all or most of the members of the group actively participate, and if students match their own powers with one another as well as with the tutor, will then become a real teaching-learning tool and the process as well.

This is about the nature of the tutorial. The tutorial is not conceived as a measure to seek to overthrow the lecture-method and to displace the lecturer. It does not minimise the place and the role of the lecturer and his scholarship. The latter is regarded vital even for the tutor, who is expected to be as much proficient as the lecturer in the knowledge of the subject—perhaps he should know his subject more inside out. A tutor is expected to be better equipped mentally than the lecturer—he should have what Sir James Mountford calls a mind with a cutting edge, which is alert to the good and weak points of a student's effort, and is critical, tolerant and encouraging by turns. It is those qualities of a sharp mind, skills of guiding students from one thought to another, the quality of the heart, the quality of attitude and

interest that make the role of the tutor more crucial than that of a lecturer.

The second pertinent question is about the objectives of the tutorial. Its objectives are the objectives of really good education, which are to help students grow in knowledge, understandings, ability, application, skills, attitude and interest. Good education is like gardening which nurtures the plant and is not like carpentering which "cuts pieces of wood to fit into certain locations or painting which covers them with an exterior coat of paint." The objectives of tutorial work are just like those of the gardening. The tutorial seeks to stimulate thinking, deeper intellectual interest, better perception, better study-habits and educate young men and women in the real sense of the term (education).

The further statements of the objectives of the tutorial work are as under. They are in the terms of what a tutor should aim at in the tutorial work.

"The tutor's objectives are to see that the student has produced a properly organised account of the subject, and make sure that he understands what he has written down and has written only what he believes and can support with reasons, to elucidate obscurities, to encourage enterprise in reading, thought and writing, to correct or expand the students' information, to relate the subject to its general field, and give clues about the next week's subject, as well as a reading list, with critical comments. Help should be given with difficulties, but for a lazy student the best help may take the form of a reference which he should look up. The tutorial which is sometimes confused with spoon-feeding in fact has the opposite aim, namely, to enable the student to work on his own, to think for himself, and to construct his own account of his subject."

The above statement presents clearly a number of specific objectives of the tutorial work which the Indian lecturers and professors would do well to keep in mind.

The third pertinent question is "who should do the tutorial work?" The answer is all the teaching staff members of the institution from the grade of professors to tutors, from the Head down to his junior-most assistant. The importance of tutorial work should not be rated low. As Professor R. B. McCallum of Oxford said in 1947, "When the student leaves to take his

career, he can be spoken of with a degree of understanding and confidence that must command respect." This can only happen if he has a fair chance of having a professor for his tutorials and also the best of the lecturers. The Radhakrishnan Commission's observations on this point are as under :

"Under the ideal conditions only experienced teachers ripe in scholarship, adapted by temperament for tutorial work, and not heavily loaded with other duties should be tutors. Unfortunately, the present state of our universities, over-crowded with students and under-staffed as they are, does not permit of such a selection.....In most colleges and universities the entire teaching staff will have to be drawn upon for tutorial work, even though this may be repugnant to some teachers and not satisfactory to all students." (Report, P. 108)

The fourth pertinent question is: what should be the size of the tutorial group. As the tutorial involves personal confrontation of the minds of the teacher and the student, the tutorial group has to be small. It cannot be the single student tutorial. This practice seems to prevail still at Oxford and Cambridge, though its measure has got more reduced at present than in the past. The Robbins Committee testifies to this. "Less than half the tutorials given in Oxford and Cambridge are given to a single pupil. Even in the older universities of England, the single-pupil tutorial has to a considerable extent given way to the double tutorial and to small classes." In a country like India, with universities and colleges in a state of spate; the single student tutorial will be prohibitively costly and extremely wasteful of the teacher's time and energy. Even the Robbins Committee has expressed against single student tutorials. The Committee did not believe that the desirable state of affairs, in which a student comes into the personal contact with his teachers, he brings individual difficulties and problems to his teachers and that his progress becomes a matter of sympathetic concern to them can always be best achieved by individual tuition, every pupil enjoying one hour a week by himself with a tutor. The tutorial is an arduous affair. It is exacting both to the student and to the teacher. A teacher will not have patience and energy to repeat his instruction to a large number of students. A single-student tutorial of the Oxbridge

pattern should; therefore, be ruled out for India. The size of the tutorial groups should be realistic in the perspective of difficulties of staff, classrooms and resources in Indian colleges and universities. An Indian educator, an Oxbridge product himself, suggests from his own experience, that "six might be an ideal number in the Indian context, 8 would be more realistic and 10 perhaps the very limit, if the real purpose of a tutorial is to be achieved." One has a legitimate fear that colleges will not have staff to provide tutorial even on the basis of one teacher for 10 students. In 1968, in university colleges there was for every 15 students one teacher and in affiliated colleges for every 20 students there was one teacher. In Indian universities, the tutorial groups shall have to be between 10 and 15, if it cannot be more than 15.

The fifth pertinent question is : how much tutorial work should have a place on the class time-table ? In the universities of England and Wales, the position in this respect is as under : Of the total 14.8 hours of study work per week put up by the under-graduates, the discussion periods account for 1.6 hours against 8.1 hours for lectures, 4.6 hours for practicals and 0.5 hours for 'other teaching'. In humanities, of the total 10.1 hours that an under-graduate spends in class instruction, 2.3 hours are on participating in discussion periods as against 6.8 hours on attendance of lectures, 0.6 hours in practicals and 0.4 hours in 'other teaching'. In science, of the total 17.4 hours of work 8.8 hours are the discussion periods in contrast to 8.3 hours of practicals and 0.3 hours of 'other teaching'.

It will, thus, be seen that even in British universities, a high proportion of instruction (55 per cent) is received through lectures, and tutorials in the form of discussion periods get only 10.7 per cent of allotted time. I do not want to imply that the British position in respect of the weightage given to tutorials in point of time should be followed in Indian universities, as the situation represented by them is ideal. But realities of classroom facilities, staff-student ratio, availability of instructional and reference materials in regional languages, etc. are to be paid careful attention to before any decision on the time-allotment on tutorial work is taken in Indian colleges and university departments. In Great Britain, the staff-student ratio is 1:7.3 whereas in India it is 1:18.7. In this situation, we cannot reasonably expect our colleges and university departments to make better tutorial provision than the British universities. It is not possible, within the

current financially strained conditions of the Indian universities to reach the ideal position of the American universities where more instruction takes place through small-sized seminars than big audience type lectures. Keeping our limitations of resources well in focus, we should consider one or two hours of tutorial work per week quite reasonable in Indian situation.

The sixth pertinent question is: from what under-graduate class should the tutorial start? In Indian universities, there is the pattern of the Three-Year Degree Course. It is preceded either by a Higher Secondary School course or one year of Preparatory University Course after the Matriculation. The average age of entry for the student in the Indian university is about 16 years. This fact of the student-age at entry in the university has relevance in deciding from what college class the tutorial work can reasonably be started.

In order that the student derives maximum benefits from the tutorial work, he should have a fairly well matured mind and minimum intellectual equipment to do independent study-work. The tutorial work, therefore, would not be much fruitful and productive in the Preparatory University Class and even in the First Year Degree Class. (In British universities, the average age of entry for students is 18 plus.) It is in these classes that the enrolment is usually high. Therefore, even on the practical considerations of finding enough teachers to conduct tutorial groups of reasonable size, the commencement of tutorial work should be delayed till students come into the Second Year Degree Class. The following argument has been put forward in favour of beginning the tutorial work from the Second Year Degree class: "In the first year, even the best boys and girls would probably lack the minimum background necessary to start on the exacting and arduous intellectual discipline of a tutorial. The first year may, therefore, be profitably spent on an intensive scheme of library work in which as many freshmen as possible, carefully screened, are launched on a programme of extensive but well directed reading in their subjects."

It sounds reasonable to commence the tutorial work from the Second Year Degree Class. However, it will not be good to provide no opportunities to the students of the Preparatory and First Year Degree Classes to meet their teachers in small groups say, of 20 or 25. The purpose can be different. It may be for

personal counselling or for providing broad group guidance in the use of library, note-making and note-taking, organising and scheduling time for study, rest and recreation and forming study habits, etc. Such 'tutorials' would prepare the students for more challenging and exacting type of tutorials that would begin from the Second Year Degree Class. There is a commendable practice in some Indian universities and colleges to assign a pupil at entry to a tutor or a supervisor of his studies, whom he can consult at any time over his work, and if he wishes, his personal affairs. This practice should be started in all the colleges and universities, and may be used to form initial tutorial groups and tutorial work.

Our conclusion regarding the lecture method and the tutorial is that both form important methods of teaching-learning at the under-graduate stage and both should have a place in the scheme of teaching. Lectures are necessary in giving students a wider perspective than that afforded by the text-book and helping them to comprehend difficult and fast growing voluminous body of knowledge. But under-graduate teaching should not end in lectures; they on the contrary should lead to the other mode of learning, viz. learning through participation in critical exchange of thoughts, learning through further reading, further study and pondering.

Written assignments based on lectures should be developed by tutors with a view to helping the students to cover wider and deeper aspects of topic dealt with in lectures. The tutorials should supplement lectures; they should aim at building up the student's mind, develop in him skills in reading, in making his own independent study, in drawing the right conclusions in putting forth and defending these conclusions. Tutorials should be really a clash of minds of the tutor and students, the latter trained to use their own wings and to pursue their own "intellectual flights". In order that tutorial work becomes successful in private and university colleges, the staff cabins and classroom facilities as well as libraries should be strengthened, the student-teacher ratio be brought down at least to 1:15, and the Head should provide instructional leadership to building up a climate for sincere, regular and systematic tutorial work.

THE SEMINAR

It is another method of teaching-learning. The instructional situation is discussion centered around a topic, event, problem idea or so and conducted in a group of the size where increased

inter-action is possible. This description may sound similar to that of the tutorial. But both differ in nature, the maturity level of the participants and even in their respective focus. The tutorial is usually centered round a written assignment previously prepared, assessed and commented by the teacher; the seminar centres around a definite theme of penetrating and provocative nature to ensure involvement of almost all members of the group. The size of a tutorial is limited to 6 to 10, whereas the size of a seminar can be bigger than this. In the tutorial, the clash of minds is between the matured and well informed mind of a master and the developing, learning mind of a novice; in the seminar a group of mature minds is involved in joint thinking, weighing, and evaluating—the one who directs the seminar may or may not be more learned than or be having superior ability to the others who are participants. Both the tutorial and the seminar have a common objective of stimulating the intellectual effort and a common medium of discussion. In tutorial, the tutor leads the students to truth; in the seminar the truth is reached through the co-operative efforts of the group.

The seminar in this sense is more suited to the post-graduate classes and courses where the learners are more matured and able students. This was the thinking evinced by the Radhakrishnan Commission in 1949; the same has been the view taken by the Robbins Committee in 1963.

Seminar work can be geared to lecture work as in the case of the tutorial. In many British and Australian universities, in certain courses in humanities and social sciences, the teaching of a course is done through first 5 to 6 key or background lectures, and the other parts of the course are covered through seminars of small groups. The class is divided into small groups of 10 or more, depending upon the size of the class. Each group is placed under a tutor. The tutor gives reading or written assignments to individual students on different untaught topics of the course. Each student is then required to present the paper—the written assignment, and lead discussion thereon. This kind of seminar combines the features of both the tutorial and the seminar. This is also practised at the post-graduate level.

CONCLUSION

There is an unquestionable need to improve teaching-learning in under-graduate and post-graduate classes. The lecture method

is no doubt indispensable in the Indian situation of scanty means and resources. But it cannot be the sole method. It cannot also be allowed to continue in its current style, size and focus. It has to be considerably strengthened in content, organization, delivery and supplementary work following the instruction imparted through it. A variety of methods should be used.

At the under-graduate level, the tutorial method in a small manageable group with preliminary *spade* and supplementary work done by the student should be tried. The cutting edge of the mind of the teacher should be used to stimulate and sharpen the intellectual effort of individual students in the pursuit of excellence.

With mature students, the seminar method can be advantageously tried in post-graduate classes. Learning should be the result of the clash of penetrating minds. A good combination of the lecture, the tutorial and the seminar methods can be successfully made at this stage. The author has tried out this combination in some courses he taught in the Baroda University in the Educational Administration courses at the M. Ed. level. The verdict of the students was that they enjoyed and profited much by this method.

We should have a variety in college and university teaching !

AREA 6 :

MEDIUM OF INSTRUCTION IN UNIVERSITIES

I wish to reiterate that the universities would be adopting the regional medium upto the the first degree course mainly on the ground that such adoption would help to improve the quality of education and would receive better response from students. This course is adopted not with a view to make education easier or cheaper in quality, but, on the contrary, to make it better in every way. The present controversy about the change of medium seems unfortunately to have created a feeling in the minds of students in some universities that as a necessary consequence of the change, the study of English can and should be discontinued altogether. This notion must be promptly corrected and in the interests of the students themselves; university teachers should convince the students that the study of English is absolutely essential if they want to make their education worthwhile even upto the stage of the first degree examination. The agitation to remove English altogether from university curricula and the claim that degrees should be given to students even though they may have failed in English is, in my view, a retrograde step and will certainly impair the quality of education and adversely affect the students themselves.

—Justice P. B. Gajendragadkar

THE PROBLEM OF MEDIUM : PSYCHOLOGICAL BASIS

SOME DIMENSIONS OF THE PROBLEM

The problem of medium of instruction and evaluation at the university stage is still on the anvil. The national picture is one of scramble, passion, political clap-trap and divergent and discordant academic notes. Foreign visitors to this country often wonder how such a straight-forward and simple issue can provide passion to warring groups. But there is a possible explanation to the present diffused and to some extent confused position on the issue. Indian higher education has inherited from the British rule strong traditions of university education through English. Many of the present university administrators and teachers and the political leaders are the products of the English medium university education. It has become difficult at least for a good number of them to think that advanced education can be imparted through regional Indian languages. Some of this group have developed rightly or wrongly fears of a possible fall in standards of higher education with the replacement of English as a medium of instruction by Indian languages. A volume of opinion on the issue is apprehensive about the suitability of Indian languages in their current state of development to serve as media of higher education, especially in sciences, technology and medicine. The fears of losing international comparability in university standards are haunting not a few. Some see the root of the present phenomenon of scramble regarding the medium as an inevitable feature of a developing economy. "The image of the connection between official language and political and economic advantages persists when they think of the medium of instruction, because education is generally looked upon as a process leading to a career and a profession". A good number of students and their guardians favour English medium universities because a degree from them has a higher market value and greater cultural

advantages. It is often felt by students who are the products of universities which impart education through regional languages that candidates for competitive public examinations who had received their education through the medium of English command considerable advantage over them. Unless regional languages are given their rightful place as optional media for taking all competitive public examinations, the solution to the problem of medium of instruction of higher education will continue to be clouded. Thus, the question of the medium of instruction, though in itself is simple and straight-forward for a free and self respecting country, has acquired many dimensions which have made it complex and elusive. Gandhiji used to say that the question of medium of instruction has been solved for ever for all free countries and it is not for university teachers and administrators to bother about the language through which her young men and women should study. Unfortunately, various factors and forces have come into play and they have jeopardized the issue to such an extent that educators and administrators cannot help bothering about the question.

MEDIUM OF INSTRUCTION AS A TOOL

In the heat of the controversy, it is often forgotten that a medium of instruction is merely a tool and that apart from its psychological and instrumental values, it has, in itself, not much pedagogical significance. It is not a tool merely to collect bits of information or knowledge in certain disciplines, but is a means to achieve growth for the student community in knowledge, skills, specific abilities, interest and attitudes. University education has much higher goals than mere acquisition of information and exercises in rote memory. As some one has said :

✓ "The principal object of universities is to deepen man's understanding of the universe and of himself—in body, mind and spirit, to disseminate this understanding throughout society and to apply in the service of mankind."

It would thus be seen that the objectives of higher education go much beyond acquisition of smattering of knowledge in general and specialised fields. And the vehicle of achieving the objectives in our young men and women is the medium of instruction. If we are really serious that the students of universities "seek and cultivate new knowledge, engage vigorously in the pursuit of truth and interpret old knowledge and beliefs in the light of new needs

and discoveries", we must also provide them such a vehicle which most of them can use with ease and confidence in achieving such lofty ideals. Thus, a medium of instruction has not absolute values—not even cultural values, it has primarily functional values. If universities and colleges are to be made dwelling places of ideas and idealism, we must put at their disposal such a tool of language which can facilitate such sojourn in higher realms of knowledge. We often complain that our students do not have ideas and do not think independently. The explanation perhaps lies in the fact that we have all these years striven to provide them such a vehicle of thoughts which, instead of facilitating creative thinking inhibited it. We do come across products of the Gujarat Vidyapeeth and such other national institutions who, by and large, do not fail to impress us by the freshness, depth and creativity of their thinking. We do find some kind of vigour and vitality in their thinking and expression. Other things like intelligence, aptitude, motivation etc being equal, the undergraduates of the Gujarat University and of the Sardar Patel University do stand out conspicuously from those who studied in English medium universities in their chaste and vigorous expression, in their ability to think on their own, and in richness of ideas. Many would like to challenge this statement, but this was exactly the feeling the writer had gathered when he studied some products of the Sardar Patel, Gujarat and Baroda Universities over a period of time. (The subjects were all student teachers enrolled in the education courses in the Faculty of Education at Baroda). So, the problem of the medium of instruction in universities should be really approached from the pragmatic consideration of the achievement of objectives of higher education in students.

MEDIUM OF INSTRUCTION AND LEARNING PROCESS

If a medium of instruction is a tool, a vehicle of growth in knowledge, abilities, skills, interests and attitudes—albeit a tool of learning, the question of the suitability of a medium of instruction should be decided not on the basis of cultural, political or economic considerations, but on the considerations of its effectiveness as a tool of learning. Which medium—English Hindi or a regional language (mother-tongue), is more natural to the learning process?

Tagore used to give a picturesque analogy in driving his point relating to the mother-tongue as a medium of instruction home

to his audience. He used to say that dishes of delicious and inviting food have been laid down on the table and the student is quite motivated to eat it. Then, why delay the satisfaction of his appetite by giving the English names and English explanations of the wonderful dishes; let him go straight to the food and make the best of it ! What the great thinker-educator really means is that we should allow the formation of direct bonds between what is to be learnt and the learner. Such a direct association is provided by the mother-tongue of the student because it is a natural tool of his intercourse with the environment and the learning is direct. English or any other language which has not become a part of his mental texture acts as a serious obstruction, and the effectiveness of learning is definitely affected.

“ A volume of literature on experiments and researches by psychologists, linguists and neurologists on the relation between language and the learning process is now available. These studies have great implications and can provide great assistance in arriving at a right decision regarding the controversy of the medium of instruction in institutions of higher learning. Ramnathan enunciates the fundamental principles of learning in the following manner:

- (i) Learning takes place with maximum effectiveness when it is conducted through the language best understood by the learner;
- (ii) Learning is effective in proportion to the learner's competency in the language in which the sources of learning are available;
- (iii) Learning conducted through a particular language can be effective only to the extent to which that language is competent instrument for the communication of the contents of learning.

The implications for these principles of learning are clear. The centre of all consideration is the student and the basic issue is: what language is best understood by the learner? If it is English, let the medium of instruction in colleges be English. If it is Hindi, let it be Hindi then. But if it is the mother-tongue, then the medium of instruction should be the mother-tongue of the student or at best the regional language. The first principle is so rational and sensible that it needs no arguments to show that the learner should understand what he 'learns'. This is fundamental because without real understanding, the learning does not stick long and it can never be a vehicle of 'ideas' or 'idealism'

or 'an instrument of change' which the Kothari Commission so greatly emphasises as objectives and functions of higher education.

The National Integration Council also held similar views : "The change in the medium of instruction is justified not so much by cultural or political sentiments as on the very important academic consideration of facilitating grasp and understanding of the subject-matter. Further, India's university men will be unable to make their maximum possible contribution to the advancement of learning generally, and science and technology in particular, unless there is a continuous means of communication in the shape of the regional languages between its masses, and its university men."

Thus, if effective learning is the goal we have in mind—and it is a crucial goal, the medium of instruction, from the point of the psychology of learning, can be nothing else but the mother-tongue in the case of the vast majority of students and English in the case of a minority. The National Integration Council has truly expressed the fear that if regional languages are not made the media of higher education, 'the talent latent in the country will be retarded'. It is heartening to note that the Kothari Education Commission has agreed with these observations of the Council.

Thus, the first principle of learning leads us naturally to the choice of Indian languages as the media of instruction. But the second principle weakens somewhat the claim of the Indian languages to be the media of instruction in colleges and universities. The second principle states that 'learning is effective in proportion to the learner's competence in the language in which the sources of learning are available'. It is a matter of common knowledge that the bulk of sources of higher learning is in the English language, and most of our students do not have competence in English. So, though Indian languages are not rich as sources of modern knowledge especially in science, technology and medicine, the principle does not lead to the conclusion that because English is rich in sources of modern scientific and professional knowledge, it should be retained as the medium of instruction. The second principle itself provides an argument against making English as the medium of instruction because students, by and large, have poor competency in English. There are two possible solutions to the problem, viz., strengthening the students' learning of English in higher secondary schools or pre-university classes and under-graduate college classes by organising special courses in English learning, and develop in each

subject, technical vocabulary in Indian languages with equivalents in English (or absorb in Indian languages the English vocabulary of technical terms) and making it available to every student. This would facilitate the use of English as a library language. The Kothari Commission has rightly stressed the need for strengthening the teaching of English in colleges so that it can be used as a library language or a language of the sources of knowledge. "Since an adequate command over a library language is indispensable for a university student, we recommend that adequate facilities should be provided in universities and colleges for the study of English and where necessary or possible, for other library languages."

Thus, the implication of the second principle of the psychology of learning is that the medium of instruction at the university stage can be a regional language provided adequate measures are taken to develop in students, skills to use English and/or other European languages as library languages.

The third principle relates to the competence of a language to serve as a medium of instruction, in this instance, of higher education. There is no denying the fact that the Indian languages are, by and large, in their present state of development, not competent instruments for the communication of the contents of learning. This is more true in respect of the contents of learning in sciences, technology and certain professional fields like medicine. This fact had been recognised by the Official Language Commission (1955) which opined that the lack of terminology in various subjects was the chief obstacle in the way of employment of Indian languages in different fields. But this is not an insurmountable hurdle. There are two solutions to this problem. One is to absorb the technical terminology as it is in English, in all Indian languages. Or, as the Committee of the Parliament on Official Language had recommended that "the technical terminology (to be evolved in Indian languages) should be approximate closely to English and international terms". There are no legitimate grounds to entertain fears that a common core of scientific and technological vocabulary will jeopardise the chances of different Indian languages to grow according to their genius. "The different languages of Europe have continued to grow according to their genius notwithstanding the fact that they have a common core of scientific and technological vocabulary". Thus, the fact of the under-development of Indian languages cannot be rightly upheld to disqualify them to serve as media of instruction. The solution of the problem does not lie in discarding them as

useless but in making them the more vigorous and developing them imaginatively and pragmatically. It is an irony of fate that a staunch protagonist of English as a medium of instruction like Lord Macaulay had contemplated as early as in 1835 the enrichment of Indian languages to serve as instrument of the communication and instruction of higher knowledge in the same way in which some of the Indian educators are now pleading Lord Macaulay had said in his Minute

"Our concern should be to refine the vernacular dialects of the country, to enrich those dialects with terms of science borrowed from the western nomenclature, and to render them by degrees fit vehicles for conveying knowledge"

CONCLUSION

To sum up, the three principles of learning enjoin that regional languages should be the media of instruction in order that maximum effective learning can take place. It is true that in the situation as it is to-day, the English language has a great advantage over Indian languages to serve as the medium of instruction of higher education because it has the sources of learning and is a more competent instrument of higher learning. But of more significance is the first fact, that learning imparted through the mother-tongue of the student is more likely to have maximum effectiveness. By taking adequate and effective measures for making the use of English as a library language at the university stage and absorbing English or international nomenclature in science, technology and medicine in Indian languages, the controversy regarding the medium of instruction in universities and colleges can be solved. The solution to the problem lies in raising the standards of learning in English simultaneously with making Indian languages as media of instruction. We conclude this Section by quoting the following from the Report of the Kothari Education Commission with which we are in complete agreement -

"While the goal is to adopt the regional languages as media of education, we should like to stress that this does not involve elimination of English. In fact, English, as an important 'library language', would play a vital role in higher education. No student should be considered 'qualified for a degree, in particular, a master's degree, unless he has acquired a reasonable proficiency in English (or in some other library language)"

THE THREE-LANGUAGE APPROACH IN MEDIUM OF INSTRUCTION

THE BASE OF THE APPROACH

The problem of the medium of instruction at the university stage is a very old one. Almost all the Committees and Commissions on Indian education have discussed it threadbare and made wise recommendations.

Though quite a number of these recommendations, if put together, contradict and cancel one another, there are still a number of them which, if implemented, will contribute handsomely towards the solution of the problem. It is true that the problem is very complex; it involves many and varied issues; it is tinged with emotion and passion, and that the politicians and fanatics have almost 'spoilt' it. However, its solution should not be deemed difficult, if it is sought on an academic plane, in reference to the maintenance and upgrading of university standards and in consideration of the needs and difficulties of the learners. Not that national interests or considerations of national self-respect involved in the issue of the medium are not important or less important. But still, however, the solution of this issue will have to be ultimately sought academically. It must be borne in mind that a medium is a means of imparting education; it is for students a very important means of acquiring knowledge, skills and competencies and developing attitudes and interests. Academic considerations are not incompatible with national interests. As Justice Gajendragadkar has said, "In the ultimate analysis true national considerations cannot be very much different from the academic considerations."

Academically, the question of the medium of instruction should be viewed from the following stand-points :

- (a) the nature of courses or subject-fields;
- (b) student's preparatory back-ground;

- (c) the language in which a teacher has proficiency in expression;
- (d) the availability of the reading and reference materials for students;
- (e) stages of instruction; and
- (f) maintenance or raising of university standards.

NATURE OF COURSES

The courses in Humanities and Social Sciences are more language-weighted. That is to say, the students' ability of expression becomes a crucial factor both in his learning the subjects as well as in the examination or evaluation of his achievement in those subjects. This has relevance to standards. Academically, it is, therefore, rational that the medium of learning and examination should be the regional language which will be the mother-tongue of a large majority of the students in the class. Reading materials have been prepared in Indian languages in a fairly satisfactory measure in most of the subjects of Humanities and Social Sciences. So, textbooks and reference-books will not pose a great problem in the changeover. The undergraduates will not read books only in regional languages in their subjects. They will be encouraged to refer to some standard books in English in their subjects. This can be done by giving students written assignments based on such standard books in English which can be taken up for critical examination, and evaluation in tutorial periods. In certain subjects of technical nature like Psychology, it will be more advantageous to adopt international terminology even in regional languages. Technical terms should continue to retain their English names.

Does it mean that the recruitment of university or college staff in Humanities and Social Sciences be done on regional basis? The answer will be in the negative. The universities and colleges should go in for the best qualified, competent, and experienced teachers, no matter to whatever language-group or linguistic region they belong. These teachers should be free to teach their subjects in English or even in Hindi if the latter is understood by the students. In that case, though the regional language will be the main medium of instruction and examination in a university or an affiliated college, it should be permissible to teach the subjects either in English or in Hindi. It will be absolutely necessary to adopt the Three-Language or Two-Language Formula for the medium of instruction and examination at the undergraduate stage in universities.

The extreme stand in the matter of medium of instruction should be avoided. Even in universities where the medium of instruction is English, there should be nothing to prevent the teacher to explain crucial facts or ideas in the regional language or use the regional equivalent of key words in his lectures. Instruction has not done its function if it is not understood by pupils. When a teacher finds that his class is deficient in the knowledge of English, and if he has to teach the subject through English, he should not feel hesitant to use the mother-tongue, along with English in explaining the key concepts, principles, processes and techniques. That would create better confidence in students. They would try to understand lectures more, and even in examinations, there will not be mere reproduction by rote memory but evidences of understanding and independent thinking. The question papers in examinations can be in the regional language and English.

11

Professional subjects like Science, Engineering, Technology, Medicine, Veterinary Science, etc. do not require much of language ability on the part of students. These subjects have traditions of teaching and learning in English. Textbooks and reference materials of international standards in these disciplines are in English. There is explosion of knowledge in these fields, and the rate of the expansion of knowledge in them is so terrifically fast that it will be almost suicidal on the part of the nation and the students to change over the medium of teaching and examination in these subjects from English to any of the Indian languages. The standards will undoubtedly go down.

In the discipline of Law, it is vitally important that the medium continues to be English. An eminent authority on law as well as on university education like Justice Gajendragadkar has said, 'in regard to law, there are weighty and valid grounds which make regional languages absolutely inappropriate as media for the High Courts and the Supreme Court.'

In 1963-64, the U G C Committee on Standards of University Education had made an inquiry in regards to medium of instruction followed in the Indian universities then in existence. The inquiry covered 53 universities including 4 deemed universities. In regard to professional subjects the Committee's findings were, "English is the medium of instruction and examination in almost all the

universities for professional courses like law, education, agriculture, veterinary science, engineering, technology, medicine, etc." (Report, p. 70) Thus, there is a well-established tradition in Indian universities of teaching and testing in professional disciplines in English which should not be disturbed in any eventuality.

STUDENTS' PREPARATORY BACKGROUND

At the secondary stage, in almost all the States of India, the regional language is, by and large, the medium of instruction. The students who enter the portals of colleges and universities come with a background of learning and examination in almost all curricular subjects in the mother-tongue. They find it mightily difficult to switch over from the learning in the mother-tongue to that in English in the Preparatory University Class.

To improve this situation, first, in the Preparatory Class, a printed list of key vocabulary in each subject of Humanities, Social Sciences and Science should be given to students in English with their equivalents in the regional language. This would go a long way in helping the students to understand class lectures and basic textbooks as well as standard reading references in English. Secondly, short courses for intensive learning of English as a language should be developed in each university and taught preferably in a separate Institute of English which should be established on the campus of every university. It is said that the German Government is organising 6 to 8 weeks of intensive teaching of the German language for the benefits of the foreign students who do not know anything of the German language, and they have succeeded in imparting to such students a fairly satisfactory command over the German language both as a tool of oral and written expression as well as of reading comprehension. And this is done in a period of 6 to 8 weeks only. In contrast to that situation, students entering Indian universities are much better placed. They bring with them 6 to 7 years of English learning. Therefore, well prepared and well taught short courses in the English language should succeed in imparting adequate competence of using English as a library language. The Kothari Commission has also recommended a similar arrangement. "Special units of teaching English should be established in universities and colleges whose main objective would be to give a good working knowledge of English to new entrants by the adoption of modern teaching techniques and in as short a time as possible.....No single course in English would

meet the needs of all these students. It should, therefore, be a responsibility of the English units' to adjust their teaching to the needs of the different categories of students and to ensure that they are all given at least essential command over the language which will enable them to use it efficiently as a library language." (Report, p. 293)

Apart from giving training to students in English in the University Institute of English for developing adequate competence in using English as a library language, it will be advantageous to teach some English peculiar to a subject as a part of the instruction in that subject. That is to say, for example, in a course on sociology English should be taught for a period or two in relation to expressions and phraseology peculiar to the field of sociology. If this is done in all courses of studies, it would improve students' understanding of different subjects which are of technical nature.

LANGUAGE OF THE TEACHER'S PROFICIENCY

The teacher is a crucial factor in teaching. He is the instructor. It is, therefore, necessary that he imparts instruction in the language in which he is competent and feels confident. In deciding the medium of instruction, the proficiency of the teacher in the language of instruction should also be considered. The point here is that, even if the medium of instruction is a regional language, and on the staff of the college there are teachers whose mother-tongue is different and who can teach through English or Hindi, they should have the facility to teach in the language of their proficiency. This would have an advantage of ease of recruiting teachers from different linguistic areas on the basis of their scholarship and experience. This would permit the inter-change and migration of eminent teachers from one university to other universities.

READING AND REFERENCE MATERIALS

The medium of learning and testing should be that language or languages in which there are adequate and easily available reading and reference materials. This point has been examined in detail in the preceding section. Evidently, on this score, English will have most of the claim for being accepted as the medium. However, steps have been taken both by the Centre and the State Governments to prepare appropriate and adequate books in regional languages. For instance, recently a crore of rupees has been placed at the disposal of each State by the Centre to prepare textbooks

for university subjects in its regional language. The private publishers have also entered the field, and a good measure of reading material is being published in Indian languages. Some of the Indian universities have also got standard books in Humanities, Social Sciences and even in Science and professional subjects, prepared and published by them. So the situation in this respect has been improving. Reading and reference materials at the undergraduate stage do not pose a great problem, which it did sometime back, though difficulties of finding learned and original books in Indian languages continue. But the situation has been improving. This would be tantamount to saying that it will not be very risky from the point of the maintenance of standards if regional languages are accepted as media of instruction in non-professional subjects at the university stage.

STAGES OF INSTRUCTION

The foregoing discussion and the problem of medium discussed in the preceding Section tend to suggest that it is possible to adopt regional languages as the medium at the first degree level in non-professional courses. However, in the same university, within the different institutions and within one institution or Faculty, the possibility of using English and Hindi as concurrent media of instruction is not to be ruled out. Even in the under-graduate classes, freedom should be accorded to both teachers and students to teach and learn in the languages of their competence. If such choices are given, students will use the language in which they have confidence for understanding as well as expression. The findings of some studies suggest that even if such options are given, good students continue to read and write their examination papers in English. For instance, in the courses on Education in the Baroda University, our experience has been that a large majority of students use English in technical courses like Psychology, Measurement, etc., even though they have an option to write examination papers in Gujarati, Marathi or Hindi.

Thus, with this catholic kind of the Three-Language Approach, it is not going to be damaging to standards if the medium is the regional language at the first degree courses in non-professional subjects. It should work well academically, culturally, socially and even politically. Of course, economically it will be rather somewhat expensive. But that cannot be helped. One cannot expect a solution to such an intricate, intriguing and

disruptive problem, which should be largely acceptable to people, which is academically sound and at the same time inexpensive.

If the staff of university departments and affiliated colleges is recruited on the basis of scholarship and competence, irrespective of the linguistic group to which they belong, it will be easier to retain English at the post-graduate stage. This is a crucial stage of specialised knowledge and deep scholarship. Extensive and deep reading, internalisation of knowledge, independent study, penetrating, thinking, skills of interpretation and application, creativity and such other intellectual developments are expected of the post-graduate students.

As Dr. D. S. Kothari has said, the doubling period of world of science and technology is ten years or so. It will be impossible for the Indian languages to be able to keep pace with the English language in publishing books and journals on the growing and fast expanding knowledge in science and technology in this context. Apart from this, regional languages have not yet been able to produce that quality of literature, and of such extensive nature, that they can be used as the media at the post-graduate stage. In universities, where the regional languages are made the media of instruction even at the level of Master's degrees, the results have been found to be disastrous. Students generally content themselves with reading a few books available in their subjects in the regional language. Very often these books are the same which they read for the first degree. They lean heavily on class notes at this stage. Their answers at degree examinations show hardly any depth. Very often the quality of student work in Master's Degree Examinations is almost of the same level as in the graduate degree examinations. They also read some English books with little serious efforts to digest the contents of these books. This has its ill-consequences in the quality of their answers. The answer papers are written in a language which is neither purely the regional language, nor English but a curious, ill-assorted mixture of both. Sometimes, they write sentences which are half in the regional language and half in English. It will take a long time before it is possible to prepare the reading materials in regional languages which are scholarly and in depth, which are varied and extensive and which provide full scope to students to differentiate and discriminate, to weigh and assess, to compare and relate and create a new synthesis.

Justice Gajendragadkar's views on the medium at the post-graduate stage are worth noting. In his Convocation Address at the

Baroda University in 1967, he said, "In regard to the post-graduate education in most of the disciplines, I am inclined to support the view that it is absolutely essential that one medium of education should be adopted by all the universities in India. Having regard to the breath-taking progress of knowledge in several disciplines, it seems to me totally unrealistic to assume that every regional language would be able to cope with the problem of higher education of this character. Besides, the problem of medium becomes secondary in respect of this stage of education. What you want is effective contact with the content of knowledge and for enabling the student to have effective contact with the maximum extent of knowledge in the special discipline of his choice, in the foreseeable future English has inevitably to be the formal medium of his education."

One, therefore, feels that the medium of instruction at the Master's degree level in professional as well as in non-professional subjects should continue to be English. This is already the case in several Indian universities. For instance, in Universities of Agra, Jabalpur, Rajasthan, Saugar and Vikram the medium is English or Hindi. In Allahabad, Banaras, Gorakhpur, Jadavpur, Baroda, and Sardar Patel, it is English. As an alternative to this stand, if at all an alternative is necessary, I would suggest that even if the regional language is retained as medium of instruction or changed over to, at the post-graduate level, a good knowledge of English as a library language on the part of students will be indispensable. The Kothari Commission has also stressed this point. "No student should be considered as qualified for a degree, in particular a Master's degree, unless he has acquired a reasonable proficiency in English (or, in some other library language." (Report, p. 292) In this context, I would further suggest that at the State level, there should be a Central Testing Agency like the Educational Testing Service of the U. S. A. which should prepare and conduct a standardised test in English as a library language for students of Humanities, and Social Sciences. (I do not think that English should be substituted by a regional language as a medium in professional subjects and natural sciences). This test should be used as a screening device at the post-graduate stage.

MAINTENANCE OF STANDARDS

In all education, the promotion, maintenance and upgrading of standards of teaching and student-learning are crucial considerations.

It will do a world of good to higher education if the question of the medium of instruction and evaluation in universities and colleges is decided on academic grounds. In this paper, this writer has taken a stand that universities should adopt a three-language approach at the first degree stage in the matter of the medium. This has been suggested on considerations purely academic. Even if the medium is to be changed over to the mother-tongue of the students, it should be done not on the basis of making the under-graduate education inexpensive, easier and thereby more popular, but purely on considerations of making it better in every way.

Some studies have been made on determining relationship between the medium of instruction and quality of students' achievements. The U.G.C. Committee on *Standards of University Education* has also carried out certain investigations into this relationship. The findings of the Committee are significant. "Our investigations have shown that the best students elect English as their medium of instruction and the standard of attainment among them was, therefore, much higher than among the others." (Report, pp. 72-73) In the Education Courses in the Baroda University, our findings are similar. The best students—the students who secure first five ranks at the B. Ed examinations are usually those who prefer to read English textbooks and reference books and write their examination papers in English, even if they have an option to use Gujarati, Marathi and Hindi.

There is no denying the fact that a good knowledge of English, as it was observed earlier, is a vital component of standards. Students with fairly good proficiency in English are found to be better disposed in using standard books written in English in their subject-fields which help in raising the quality of achievement. When the attainment in English is poor, the students tend to lean heavily on a few books published in their mother-tongue with the result that their achievement is superfluous and lacking in depth.

It is, therefore, crucial to strive to improve the quality of attainment of our students in English, whether the latter is to be used as a medium of instruction or as a library language.

CONCLUSION

In this paper a viewpoint has been set forth that a Three-Language Approach should be adopted in the matter of the medium of university education at the under-graduate level. At the first degree

level in a university, in certain disciplines, the regional language may be the medium of instruction and examination, and in other disciplines, the medium may be English. However, even in those disciplines where the medium is the regional language, teachers should have freedom to teach their subjects (and students can answer their examination questions, if they so desire) either in English or in Hindi. Within a single institution, it should be possible to teach different subjects, in the regional language or in English depending upon their technical nature. And students should be assisted at all stages and in all classes to improve their attainment in English.

In professional subjects, even at the first degree stage, the medium should be invariably English.

All post-graduate instruction and doctoral research work should be in English. At this stage, as the Conference of Vice-Chancellors (1967) has observed, "the question of medium of instruction loses its usual meaning, as students will have to depend (for instance in science, medicine and technology) on books and journals in English, French, German or Russian languages".

Lastly, it is emphasised here that the criteria for the change-over from one medium to another should always be that the change-over helps to raise the standards.

AREA 7 :

EXAMINATION AND EVALUATION IN HIGHER EDUCATION

Examining was largely done by the individual instructor who expended a minimum of effort on the task. College instructors have generally thought of their major functions as research and teaching and have regarded examining as a necessary evil which had to be done for the sake of the registrar and the records. Typically, the final examination for a course was constructed by the instructor a short time before it was needed, and many instructors stayed up late the night before the examination to prepare it. As a result, the final examination was likely to be something of a hit-and-miss affair in which favourite questions were repeated and in which the sampling of the learning tasks was relatively inadequate. Usually the examination consisted of a number of vague essay questions for which the grading was highly subjective and influenced largely by the quality of the handwriting, the presence of phrases and references the instructor recognized as familiar (usually his own) and by the extent of fatigue and boredom of the instructor at the time he graded a particular paper. The grade the student finally received was determined by a tremendous number of accidental and personal circumstances. While such a state of affairs has characterized examining in other colleges as well as in this one, it was clear that the improvement of examining could only be achieved as the result of the investment of considerable time and effort on the task of examining as well as the recruitment of individuals who had special competence or talent in the art and practice of examining.

—Dr. B. S. Bloom

EVALUATION IN HIGHER EDUCATION

THE PRESENT PICTURE

The present picture of evaluation in higher education in India is one of undemocratic philosophy, distorted purposes, confused concepts, defective tools, outmoded techniques, misplaced emphasis and harmful educational outcomes. The current examination system violates the fundamental tenets of teaching and testing. It totally flouts the integral relationship existing among teaching, learning and examinations. It is more dictated by social norms (rather) than educational considerations. It perpetuates the distrust of teachers and students. It is unfair to students because of a number of extraneous and subjective influences operating on it. It denies the educational system any feedback—it provides no definite clues to the improvement of curriculum, text-books, methods of teaching and techniques of learning and study habits of students. It is no wonder, therefore, that the Radhakrishnan University Education Commission had observed, that if it had to suggest a single reform for Indian education, it would be that of examination.

THE CONCEPT OF EVALUATION

If the present picture of examinations in higher education is to be effectively corrected, it would be imperative to remodel the practices and techniques of examining in institutions of higher learning in India on the concept and techniques of educational evaluation. Education or instruction is a process of assisting students to grow. Thus, to bring about the growth in students is the primary function of all teaching and learning processes. The educational function of growth is sometimes expressed as that of bringing about desirable behavioural changes in students. The term 'behaviour' is here used not in the terms of moral

behaviour or character. It denotes three psychological aspects, viz. knowing (cognition), feeling (affective) and doing (conation). These three aspects can be further elaborated to include such abilities as knowledge, application, thinking, general and social skills, social and scientific attitudes, personal and vocational interests, appreciations involving enjoyment and critical judgement and social and emotional adjustments.

This concept of growth or of desirable behavioural changes constitutes what is called instructional goals or objectives or learning outcomes. In educational evaluation, instructional goals constitute the first and the basic step. As such, it constitutes the starting point.

The instructional objectives form the primary consideration in selecting or devising syllabuses. A syllabus should be such as to make it possible to achieve instructional objectives in students.

The methods and techniques of teaching as well as of learning should also be appropriate to the instructional goals and they should be such as to facilitate the realization of objectives among the students.

All instructional reading and reference materials for students should also be selected or devised keeping an eye on the instructional goals.

Thus, there is a very intimate relationship between instructional objectives on the one hand and the syllabi, methods and techniques of teaching and learning, instructional reading and reference materials and aids of teaching-learning on the other hand.

Against this context of the relationship between instructional goals and teaching, evaluation tools, techniques and procedures are to be considered. All the three are to be conceived as an integral whole which adds to its own affinity and unity. The teaching-learning process seeks to bring about in students certain desirable growth or behavioural changes as described earlier. The purpose of evaluation is to determine the extent to which these changes have actually taken place among the students. If the desired changes have not really taken place, evaluation performs two further functions, one of diagnosing the defects of teaching and learning and the other of suggesting remedial measures so that teaching and learning can be improved upon with the ultimate goal of successfully achieving the instructional goals.

This would mean that there is not only integral relationship between instructional goals and the teaching-learning process, but also among all the three vital components of the process, viz., instructional goals, the teaching-learning procedures and techniques and evaluation and examination.

In evaluation, the function of examining or testing being to determine the extent to which the instructional goals are achieved, the nature of the tools of evaluation becomes varied, depending upon the nature of the objectives, the outcome of which is to be evaluated. Evaluation tools can be of the category of the essay questions, short answer tests, objective tests, interview-schedules, observations, check-lists, rating scales, attitude scales, interest inventories and standardized tests of achievement, aptitudes, etc.

OBJECTIVES OF HIGHER EDUCATION

The setting up of the instructional goals is the basis as well as the starting point in curriculum development as well as evaluation.

The formulation of instructional goals depends upon several factors; among those are the philosophy of education propounded, the faith in democratic way of life and form of government and the social needs and expectations entertained of higher education.

The objectives of higher education include in depth a number of desired educational outcomes. These include more and modern knowledge in particular subject fields, ability of critical thinking, social sensitivity, skills of thinking, making and doing, appreciation, worthwhile interests and attitudes, emotional poise and balance, adjustment to environment, qualities of leadership, etc.

Thus, the instructional goals of higher education are both growth and development oriented, which have a focus both on the development of the individual and of the society.

FORMULATION OF INSTRUCTIONAL OBJECTIVES

Thus, instructional goals or objectives provide the basis and the starting point of curriculum, teaching and examining. Therefore, in any scheme of evaluation in higher education, the formulation of instructional goals should receive all importance and care.

It is possible that a subject area provides scope for a number of objectives and all of them may not be of equal importance. Therefore, some considerations should be made to select among the possible instructional objectives and to determine the more important

ones. Underlying this is the assumption that the learning required to achieve the objectives, requires time and effort, and it is not possible in the limited time and with limited resources available to educational institutions to accomplish all the possible objectives.

In the Seminars of Indian University Professors that were conducted in 1953, Dr. Benjamin S. Bloom had decided upon some considerations for selection among the instructional objectives at the higher stage of learning. They were: the conception of the subject matter, the nature of the Indian society and the problems it requires to solve, the nature of the students (their achievement of previous objectives, their motivation, their aptitude, the complexity of the level of learning they can attain, etc.), the value system and the philosophy of the Indian society, and the faculty's view of learning and how it takes place. "If the faculty views learning as simply repeated practices and drill over particular material or skills, then only a limited range of objectives will be regarded as possible. If the faculty's view of learning is the development of new insights and skills which can be related to new and complex problems, then additional objectives are regarded as possible. If the faculty understands how learning can affect personality and character and attitudes and interests, then such objectives are regarded as important and as possible of attainment even in more traditional subject fields."*

Once the faculty decides which instructional goals should be selected for teaching as well as for evaluation purposes, it should also decide the possible importance to be attached to each instructional goal and the weightage to be given to it in terms of marks or points.

I may end this question by emphasizing some of the essential characteristics in formulating objectives. One essential requisite is that the objective should not be clothed in too broad or general terms so that its achievement becomes an uncertain thing. The second requisite is that it should not be a too long ranged objective—it should be rather something that can be attained at that particular stage, viz., the under-graduate stage or the post-graduate one. It should not be ambiguous; it should rather be worded precisely so that its interpretation by teachers, students and examiners is not different. It should preferably be defined in terms of the kinds of

* U. G. C. *Evaluation In Higher Education*, New Delhi, 1961, p. 53.

thinking, acting or feeling which is regarded as appropriate for a student who has attained the objective to a high degree.

SPECIFICATION OF OBJECTIVES

In a good programme both, of instruction and evaluation, the instructional goals are split up into their specifics, so that on one hand the effective planning of the approaches and of methods of teaching and learning becomes easier and on the other hand the tools of evaluation and the testing procedures can be sharply and specifically geared to the measurement and evaluation of the learning outcomes which are desired and planned. These are the most significant gains. The specifics constitute analysis of an instructional goal in terms of behavioural changes desired to be brought about in students.

An example should clarify the process of the analysis and specification of an instructional goal :

INSTRUCTIONAL OBJECTIVE

To develop in the student an ability to interpret geographical data.

SPECIFICS IN TERMS OF BEHAVIOUR CHANGES

The student

1. indicates the direction of a place, region, etc. on a map.
2. locates the position, area etc. of places, rivers, mountains on a map.
3. interprets broadly a relief map in relation to the temperature, land etc.
4. reads different types of maps, political, climatic and commercial.
5. reads simple graphs showing temperature, rainfall, export-import, etc.
6. himself prepares such graphs.
7. prepares a map for a city covering given data.
8. finds out from railway time-tables the timings of trains for going to a particular place. (Similarly for air-journey or steamer-journey time-tables).
9. reads a railway (or air-journey) map in relation to the location of a place, route of the journey, mileage, etc.
10. calculates the train-fare and luggage-fare for a given place with the help of a railway time-table.

11. predicts the climate, vegetation, etc. of a place, given the latitude and longitude of a place.
12. indicates the possible food that would grow there, given average temperature, average rainfall and kind of the soil of a place.
13. compares and draws conclusions about the life (in relation to the data) in the places, given tabular or graphical information regarding any two or more places.
14. identifies places on the basis of their average monthly rainfall and temperature for a year.

There is another way of looking at the instructional goals and analysing them in their specifics. Instructional goals are set forth in broad terms such as knowledge, application, skills, interest, attitude etc. The knowledge objective is analysed as knowledge of concepts, terms, principles, methods and procedures, etc. The application objective pertains to the use of acquired knowledge to new unknown and unfamiliar situations. The objective of developing thinking skill includes the ability of generalization from given data, the ability to recognise assumptions underlying generalizations, the ability to recognise the limitations of the data etc. Similarly, study skills would include the specifics of effective planning and effective use of time, effective use of various sources of data, effective note-taking, note-making and recording, effective organization and presentation of data and understanding of diagnostic techniques and using them for planning the remedial work of teaching and learning, etc.

This way of analysing into the specifics by formulating the ingredients of the objectives of knowledge, application, skills, etc. is applicable to different subjects of the college curriculum. It is easier and it fits more a number of the courses and the evaluation of student achievement in higher education.

PLANNING, TOOLS AND PROCEDURES

This kind of approach to evaluating students' scholastic achievement necessitates revolutionary changes in the current examination system and procedures followed in the institutions of higher education.

The first significant break-through required is in the planning and designing the evaluation tests. It is very much profitable and productive to prepare at the beginning of a new session of the

academic year or a semester a kind of a two dimensional chart. On the vertical side of the skeleton of the chart the instructional objectives may be listed and on its horizontal side the topics or the units of the syllabus may be specified. It will be more advantageous to list below each topic the number of hours per week that must have been spent on teaching it to students, as this information would indicate the importance due to the topic and the length of teaching-learning done in its respect. It would help in determining the weightage due to each topic. The second step would be to assign weightage to each objective in terms of percentages of total marks or points that can be allotted to it. Once each objective and each topic are given the necessary weightage in terms of the total marks or points to be allotted to them, the third step of determining the number of questions to be designed in respect of each objective across each topic becomes easier.

The second issue in designing evaluation in colleges and university departments is to decide the nature of the evaluation tools to be used. The current practice is to adopt essay type questions as the sole tool of testing and evaluation. This practice of using the essay type of questions in the examination brings in subjectivity and unreliability and with them a number of ills in its trail.

The essay test suffers from low content validity, as in an examination of three hours not more than 6 to 10 essay questions can be set, and with this limited number of tests, the proper coverage of the syllabus cannot be secured. Again, it is difficult to judge the difficulty index and the discriminating powers of the essay tests, with the result that they cannot be marked properly in the answer paper. It is so simple and quick to frame essay questions, that the paper-setters, by and large, hurriedly complete the framing of questions. This results in the same nature of questions repeated year, after year in ambiguity cropping up in the wordings of individual questions, in judgment becoming diffused and uncertain as regards the difficulty and discriminating values of individual questions, in options either of the over-all or the internal types getting inadvertently into the framing up of the question paper, in the time-sense being lost sight of with the result that some questions become unduly lengthy, some too brief, and the whole question paper cannot be answered in time by the average student. The questions put premium on students' capacity to cram up learning materials and reproduce them verbatim. Because of poor sampling and coverage

of the syllabus, examination becomes a hit-and-miss affair. There are other defects of using the essay question as the sole tool of evaluation.

The Radhakrishnan University Commission, the Kothari Education Commission and the U.G.C. Committees on Examination Reform have, therefore, advocated several other tools, besides the essay test, in framing evaluation tests. They include objective type recognition tests, short-answer tests, assignments, practical or field-work, term-papers, viva-voce tests using rating scales, etc.

In educational evaluation, no type of tests possesses absolute values. No tools are good and no tools are bad. Their worth is to be judged on the basis of their appropriateness to the evaluation of certain instructional goals. Such tools should be selected or devised as can be effectively used to measure the achievement of the objectives set forth in the two-dimensional plan and at the same time (such tools would) provide as much as possible objective evidence. Validity, objectivity, reliability, administrability, relative cheapness, etc. should be the considerations for selecting the types of evaluation tools.

INTERNAL VS. EXTERNAL EXAMINATION

A very pertinent issue in relation to evaluation in higher education is whether it should be through internal assessment or external examinations. If we consider the nature and the purpose of evaluation, the answer is very clear—evaluation should be internal and it should also be done by teachers who teach the subject. As I discussed earlier, evaluation has to take into account two major factors, the instructional goals set up by the teacher and the learning experiences provided by him to the students according to the instructional goals. As both the instructional goals and learning experiences are set by the teacher, it is natural that he does the testing to find out whether the instructional goals are achieved or not, or if achieved, whether achieved fully or partially. He can then diagnose where the learning—experiences proved ineffective and devise a remedial programme of teaching-learning to realize the goals in the students. In this context, evaluation has to be continuous and comprehensive. These two conditions can best be met by internal evaluation by teachers themselves.

Thus, the idea of internal evaluation and self-evaluation by teachers and students is very good and sound too. But it is feared

that internal evaluation will not work in Indian conditions. If freedom is given to teachers to grade their students, the results would be inflated, biased, invalid and unreliable evaluation. One cannot say that these fears are altogether ill founded and imaginary. But we have to help the teaching community to move towards such a stage where evaluation can be made completely internal. We might make a beginning with some weightage, ranging from 20 to 50 per cent to internal evaluation, depending upon the extent to which a faculty is prepared to take over the responsibility of fair and objective internal evaluation. This is what is being done in a large number of Indian Universities.

In the Baroda University, three out of its ten faculties have the semester system and a cent per cent internal evaluation. In the Faculties of Home Science and Social Work, this practice has been in operation over a period of 20 years. And there are no inflated results, victims of teachers' prejudice or beneficiaries of their over generosity or favouritism. The graduates of these two institutions are well received all over the country. What is required in internal evaluation is help and guidance to teachers to improve their standards of judgment and procedures of evaluation. This was done in the Faculty of Education and Psychology over a period of time and as a result of that in 1967, the entire evaluation was made internal along with the introduction of the Semester System in all education courses.

External examinations have their glaring defects and evils which are too well-known to need elaboration. External examinations are undemocratic. They develop wrong notions of a fixed body of knowledge. They foster wrong educational values and poor study habits. They tend to force teachers to abdicate their responsibility as teachers, and also question the ethics of a system of external examination which permits extremely poor and lazy question-writing and very superficial and careless marking. The external examinations in vogue in India have proved so wasteful that even a rich and advanced country in its place would not have afforded it.

Therefore, in the British Universities they have done away with the external examinations, but have kept the external examiners to check, improve and strengthen internal evaluation. In the Meerut University, the opposite is being practised. They have kept the external examinations by external examiners, but all evaluation has been assigned to selected internal teachers.

CONCLUSION

These are some of the aspects of evaluation in higher education in India. There are also some other related issues, such as the semester system, the use of the letter-grade in the place of numerical marks, the use of standardized tests of achievement and aptitude, the open-book tests, research in evaluation as a tool of improving teaching and learning, etc. All these uphold the integral relationship among instructional goals, organizing and planning learning experiences, and evaluation. The focus in all these is on the promotion of higher standards in teaching and learning, and the development of more able, better motivated and better adjusted students. And higher education in India shall have to keep all these dimensions in perspective and promote efforts to achieve them. Evaluation cannot be static; it should be live and dynamic.

PHASES IN UNIVERSITY EXAMINATION REFORM

Reform in university examination is said to have passed through three phases of development.

The first phase consisted largely of the recommendations of Committees and Commissions for reforming various aspects of examinations in universities. The Education Commissions right from the Hunter Education Commission of 1881-82 to more recent ones, viz. the Radhakrishnan University Education Commission of 1948-49, and the Kothari Commission of 1964-66 have pointed out the various changes to be effected forthwith in the pattern as well as the nature of evaluation currently in vogue in universities.

The Radhakrishnan University Education Commission had gone to such an extent of observing that if it had to suggest a single reform in university education, it would be a reform in its examination system and procedures.

RESEARCH UNITS

The Dongerkery Committee on University Examination Reform appointed by the University Grants Commission some years back again came out with a number of very useful suggestions to improve the structure and organization of university examinations and improve the reliability of marking the answer-books. Quite a number of these suggestions were repetitions in one form or the other. But there was one suggestion that was more catching and which readily found favour with some universities and with the U.G.C. It related to conducting research in examinations. This marked the second phase of examination reforms in universities. The latter came forward to set up Examination Research Units perhaps for two simple reasons, viz. firstly, conducting research was easy and least controversial, and secondly, funds came forth from the U.G.C. to establish these Research Units. Some universities like

Baroda, Aligarh and Gauhati did momentous work in conducting research on some of the aspects of examinations, such as the reliability and predictability. Dr. R. H. Dave then of the Evaluation Unit of the NCERT, New Delhi, in a talk to the teachers of the Baroda University, while acknowledging the merits of the Examination Research Units in universities felt that they were inadequate in the real task of universities examination reform. As he said, these units did some very good researches, but they missed the main thing, namely, improving the content and products of examinations. Their efforts did not spread out to classroom teaching and learning. By way of reforming the examination itself, very little was done except the fact that some percentages of marks began to be allotted for internal assessment.

INTERNAL FEEDBACK

A third phase of examination reform in universities has begun which seeks to reform not only the instruments and procedures of examining, but also the learning and teaching that goes on in university departments and colleges. Examination has now come to be regarded not a separate process but as an integral part of the curricula, methods and materials of teaching, the motivation, habits and methods of learning by students—in fact, of the educational process itself. Examinations should continuously provide a feed-back in improving the tools, techniques and materials of learning. A good examination means good teaching, better learning and more dependable evaluation.

The third phase is crucial. It has far reaching implications for the improvement of standards in university education. It would have a more salutary effect on the stimulation of the intellectual effort of the student and on the promotion of professional growth of university teachers. It would help in creating an ethos, which is very much needed, that would be more conducive to original thinking, creative effort and initiative and resourcefulness in learning among the student community. The over-all gain would be simply startling.

A BREAK-THROUGH

Along with this next step in university examinations reform, some other ancillary and supplementary steps will also be necessary to effect a much needed break-through in external examinations. Every year, a university sets, on an average 750 question papers. The total number of question papers set in Indian universities,

as observed by Dr. R. H. Dave, the Head, Department of Text-books while addressing the Baroda University Teachers' Association, is around 75,000. The common aspects of each subject taught in the universities of every State can be covered through scientifically prepared tests by making some kind of joint arrangement among the State Universities. It would help the individual universities to economise expenditure, time and energy. It would result into a better and richer pool of examination questions, the scientific processing of individual questions in each examination will be facilitated and, above all, comparable standards in each university will be maintained to a great extent. The items of syllabi in each discipline, in which universities differ, may be left to individual universities, preferably to individual university departments and colleges for testing through internal assessment. This arrangement would have the combined advantages of having both internal assessment and a better planning of external examinations. The examination results in both the internal and external examinations can be separately announced. The procedures for the award of classes or grades can be so determined that some of the dangers inherent in internal assessment can be minimised to a large possible extent.

One thing is becoming increasingly clear. No reform in examinations in universities will be possible by research cells which have no planned feedback. We need some kind of central arrangement in each university which gives continuous guidance and assistance in improving question papers, assessing answers, analysing the results, and working with teachers to develop a programme of improvement of curriculum, classroom teaching and learning, preparation of reading assignments for students, activating student learning and providing guidance to students in study habits, library reading, note-taking and note-making, understanding questions, organizing answers, etc.

It would be necessary to bring teachers together to discuss the problems arising from the results of examinations. Teachers should be oriented in new techniques of educational evaluation. They should be helped to perceive that examination is only a means to determine the strengths and weaknesses of their teaching and students' learning, and examination is not the end in the teaching process, but a beginning for planning better curricula, reading material, teaching and learning exercises.

This constitutes the next vital step in university reforms.

UNIVERSITY EXAMINATIONS SHOULD IMPROVE TEACHING AND LEARNING

A time has come when we should do some fresh thinking and take innovative steps on university examinations.

University examinations are not just for grading students and determining their fitness for promotion to higher classes or to receive degrees. The very thinking on the role and functions of examinations and Examination Sections of Universities need re-appraisal and change.

ACADEMIC ROLE

Examinations are not a matter of tradition. It is not merely a routine which has to be gone through every year by all those who are concerned with it. It is not merely an administrative measure. An examination should be viewed primarily as an academic affair. It is not divorced from teaching and learning. It is an integral part of the entire instructional or training programme. It has, therefore, an immense feed-back value. A good arrangement of examination is one which improves teaching and learning in colleges and universities. It is this academic role of examinations which should be in prominence.

The determination and declaration of examination results is not the only and sole responsibility of a university. This is only a minor undertaking. The major task of every university is to pursue the results of examinations further.

RESEARCH CELL

A university should have a Research Cell equipped with a couple of hand or electric calculating machines, functioning in close co-operation with its Examination Section. It should have, to begin with, a small staff of research assistants well-versed in the techniques of statistical analysis and interpretation. A committee

consisting of the Heads of the Departments of Education, Psychology and Statistics, with sub-committees consisting of selected Heads and Senior Professors from different disciplines provided in the university should be constituted. The Research Cell should function under the directions of the Committee which will have guidelines determined by the sub-committees from different disciplines.

DIAGNOSTIC AND REMEDIAL ROLE

It will be the responsibility of the Research Cell to probe into the results of university examinations on lines suggested by the Committee. The major focus in such analysis would be to diagnose (1) the type and extent of students' weaknesses in understanding the questions, (2) their organization and presentation of answers, (3) their mis-information, wrong understanding and lack of knowledge, (4) the specific strengths and weaknesses in their expression, (5) evidences of creativity and potentiality of further growth.

These results with interpretations should be presented and discussed at the Staff Seminars of relevant departments to determine the directions of change and improvement needed in (1) the methods of teaching; (2) text-books followed; (3) the syllabuses prescribed; (4) the audio-visual materials and aids used; (5) students' habits and methods of learning; (6) the guidance materials in use or to be developed for students, etc.

Examinations can be the best tool in improving standards in colleges and universities, if their role is properly conceived and provided for. The foremost need of the day is to assign a new role to examinations and make them an integral part of the instructional and training process. As the Evaluation Approach emphasises, 'instructional objectives, student learning experiences (which include curriculum, text-books, methods of teaching and learning, and audio-visual aids) and testing should be inter-related, facilitating a continuous feed-back from one another and thereby their improvement.

IMPROVING QUESTION PAPERS

The preparation of question papers of university examinations is unfortunately not recognized in India as a technical job. It is a kind of privilege for senior teachers. And a great number of university teachers who are year after year appointed as paper-setters of university examinations, have very little technical training or orientation in designing question papers as a whole and in framing individual questions on scientific lines.

The premium at present is on the expertise in the content of the question paper. It is the first requisite. But the paper-setter needs to know quite a bit more—the essentials of the science of educational measurement and the knowledge of the technique of constructing valid and reliable instruments for measuring student achievement.

DRAWBACKS

The present practice of paper-setting in university examinations has many ugly features.

Quite often questions are set with little pre-planning or little pre-study of the prescribed text-books or reference books on the part of paper-setters.

Research has discovered a practice among paper-setters from long distance places to scribble out question papers in railway compartments during their journey to the university centre.

Paper-setters are also found maintaining files of question-papers of different universities in their subject area. Not a few questions are copied down from such files of question papers with a few or no changes. Often the questions set at the examinations in the last five years or so of a university, have a tendency to reappear again in a straight way, or with some changes here and there.

A significant number of questions require nothing more than mere reproduction of material given to students by lecturers either in their lectures or in the notes dictated by them. They test nothing but rote memorisation.

Most of the university question papers have poor content validity. There is insufficient coverage of the prescribed syllabus in the examination question papers. This is due to the fact that usually 6 to 10 questions are set, and the whole syllabus cannot be covered through 6 or 10 questions. This results in partial testing of student knowledge. Examination becomes an accidental affair. If luckily, questions are set on topics prepared by students, they get good marks and perhaps a good class; but if that does not happen, they either fail or get a low grade.

Sometimes, the wordings of individual questions are not precise and clear. Questions may mean one thing to the paper-setter, another thing to the candidates and a different thing to examiners. This makes the marking of the answer-papers unreliable. One research finding is that 33 per cent of failures in university examinations is due to poor reliability of paper-setting and subjectivity in the marking of answer scripts.

University paper-setting suffers from such and other similar kinds of shortcomings. This makes these examinations a doubtful measuring rod of students' knowledge and skills. Indian universities have Examination Sections. But they are organised to conduct examinations and not to improve them. They are not equipped to deal with these kinds of shortcomings.

GOOD QUESTION PAPERS

Good question papers can be set. University Examination Sections should have a cell consisting of some experts in educational measurement who should analyse technically the question papers set at the university examinations in different years and prepare general guide-lines for setting question papers on scientific lines.

Senior teachers of different disciplines or departments should be given orientation courses in writing effective questions and designing valid question papers.

The convener of the committee of paper-setters should prepare a blue-print for designing question papers. He should prepare a plan of what objectives are to be tested, how much weightage in terms of number of questions and marks is to be

assigned to each objective and what type of test-situations to be used in individual questions.

If the coverage of the syllabus is to be increased, the number of individual questions should also go up. This would need less of long essay questions and more of short answer questions. Even objective questions, the discriminating powers of which are pre-tested, can be included in university examinations. This is the case in many universities in the U. S. A.

Optional questions should have no place in university question papers. They encourage among students the habit of omission of certain portion of the syllabus. And it is difficult to prepare two or more optional questions that have the comparable difficulty and discriminating values.

The time element is important. Each question should specify the maximum number of words in which the answer is to be written.

Each question should be precise and clearly worded. It should be set to measure what it is intended to measure. Other considerations like language, hand-writing, etc., if at all they have to be given weightage, should have extra marks assigned for the purpose.

EXAMINATIONS AND STANDARDS

Improvement of paper-setting in university examinations is a very important aspect of reform in examinations. Attempts are being made to improve the organization and pattern of examinations in some universities. But little seems to have been done to improve the paper-setting and valuation of answer-scripts. Good examinations can improve teaching and learning. They can contribute to the improvement of university standards, if teachers are oriented to the effective use of examinations to this new end.

Universities should consider some ways and means of improving paper-setting and valuation of answer-scripts at their examinations! Here is a challenge for Indian Universities!

ESSAY VS. OBJECTIVE QUESTIONS

One of the oft repeated and frequently stressed reforms by successive Commissions and Committees in the last half a century since 1919 for the improvement of the college and university examinations has been the use of objective type questions in the periodical tests and in degree examinations along with the essay questions. The Radhakrishnan University Commission at the advent of the reconstruction of universities in 1949 had recommended to this effect. The Commission had said, "We suggest the introduction of such valid, reliable, adequate objective examinations in the universities of India at the earliest possible time. Without this there is a danger that Indian higher education will fall into chaos", (Report, p 329). More recently the Kothari Commission has also recommended to this end.

However, there is among college teachers and university professors some built-in resistance to the use of objective tests at the stage of higher education. Their contention is that the objective test which they designate as 'quiz' may be all right at the school stage but to extend their use at the higher education stage where high intellectual powers, deeper understanding and more critical reasoning are tested will be the harmful infiltration of 'school' into the 'university and the college'. The purpose of this paper is to examine the relative validity and importance of the use of both the 'essay' and the 'objective' tests as tools of assessment and evaluation at the higher education stage.

Following H H Remmers and N L Gage in their 'Educational Measurement and Evaluation' (pp. 55-72) we will examine the relative merits and limitations of the essay type questions and objective type questions in college and university examinations using Indian data in each of the following

- Reliability of grading or scoring;
- Extensiveness of the sampling of achievement;
- Possibility of the students' guessing or bluffing;
- Pretest or motivational effects on student achievement;
- Labour required in construction;
- Labour required in scoring or grading;
- Cost of administering;
- Attitudes of students towards each type of questions;
- Intellectual pleasure and growth derived by teachers from constructing and scoring;
- Distorting effects on the achievement of medium of expression;
- Fitness for evaluation of complex achievement.

RELIABILITY

Reliability may be described in simple language as the consistency with which the marking of answer papers yields the same score or marks if done at time intervals. In other words, reliability pertains to accuracy of marking. In a good marking system, the marks or the grade should not depend upon the mood of the examiner, the relationship of the examiner with the examinee, the sex of the examinee (the assumption is that female examinees get more marks than they deserve at the hands of chivalrous male examiners and their answer books are examined less liberally by female examiners), the time and the place of assessment and the position of the particular answer papers in the pile of the answer-books.

Obviously, the objective test, with fixed and definite answers in the case of each question and being largely free from language effect is a much better and accurate device of examination and evaluation. Against this, the essay question is less accurate and less reliable because it involves a large number of subjective factors in its assessment which depend upon the mood, likes and dislikes, relationship, etc., of the examiner.

The unreliability of rating by essay tests has been demonstrated repeatedly by many studies and experiments in the U.S.A., U.K. and also in India.

In India, Dr. A.J. Taylor, Dr. A.K. Gyan, Dr. Rhea S Das and Prof. T.P. Lele have done considerable investigational work on the unreliability of the essay tests at the university stage. For instance, in one of the studies by Taylor on an English Paper marked by two examiners, it was concluded that "the score of any candidate was determined almost entirely by the accident of

his roll number and not by his performance" In another Study by Taylor on a First-Year paper in Biology large differences were found between the scoring of two pairs of examiners on each set of 110 scripts In still another Study at the Pre-University Examination of Union Christian College, Barapani, in 1962 Taylor found that "a single examiner may show considerable changes in his standard of marking as he works through the script Large variations in the standard of marking seem to be the rule rather than the exception and it will be seen that uncertainties from this source alone may easily amount to 10 marks or more' It was 5 marks or more in 65 per cent cases, 10 marks or more in 34 per cent cases, 15 marks or more in 14.7 per cent and 20 marks or more in 5.1 per cent cases In another investigation conducted, it was found that out of the total 16,542 candidates held back in the matriculation examination of one of the Indian universities in 1963, 1600 were capable of passing the Pre University Examination of that university in 1964

Studies have been also made in Indian universities on failures due to chance factor involved in the essay type examinations Bloom found that out of every 3 students who fail in Indian universities, one is due to the chance factor of the essay type examination and the memory testing questions Vice-Chancellor G S Mahajan's conclusion on this question is 'Statistical studies of failures have shown that if 20 per cent of marks on a paper signify failure, at least 4 per cent of the students may fail through chance factors on each question of a paper It follows that if there are eight papers as high as 32 per cent of students could fail on some one of the papers by chance'

Studies have also shown that 'the same teachers cannot agree with themselves on a second series of values assigned independently to the same papers' Aeburn, in a study made at the University of Virginia came to the conclusion that "the passing of about 40 per cent depends not on what they know or do not know, but on who reads the papers and that the passing or failing of about 10 per cent depends on when the papers are read". One investigator has shown that if "a C paper be graded B if it is read after an illiterate theme, but if it follows an A paper, if such can be found, it seems to be of D either"

The findings of Indian, American and British investigations are that the essay question-based examination is less reliable than the objective-centred examination

EXTENSIVENESS OF SAMPLING OF ACHIEVEMENT

A good examination should diminish, to the largest possible extent, the chance factors cropping in due to the sole use of essay type of questions and the consequent limitation on the number of questions that can be set at an examination. In the three-hour examination of essay type, it has been found that one cannot ask more than 6 questions at the university stage. Now, it will not be possible to cover the entire syllabus for the purpose of evaluating student achievement through about six questions. However, in an objective test examination of three hours, it is possible to ask at least 90 objective type questions, at the rate of 2 minutes a question. With these 90, or even 70 to 80 objective items, it will be possible to ensure a wider coverage of the prescribed subject syllabus and draw upon a far wider range of student achievement than is done in an examination consisting of only essay questions. Thus, objective examinations ensure a more satisfactory coverage of the prescribed syllabus and hence better validity* called 'the content validity'.

When an examination consists of essay questions, it becomes possible for students to guess the likely questions. Some studies have revealed that every year more than 70 per cent questions are repeated in most of the university examinations from those asked during the previous five years, with some changes of language and structure here and there.

Objective questions also run less danger of permitting chance variations in student preparation for examinations and in their achievement. Remmers and Gage believe that extensive coverage of subject matter and mental processes made possible by objective tests produce less variation among university teachers in the content selected for tests.

POSSIBILITY FOR STUDENTS GUESSING OR BLUFFING

The charge that is often made against the use of objective tests in colleges and universities is that they give abundant scope to students for guessing and bluffing. It is contended that a student without knowing any subject field can at random tick certain suggested answers of the objective test made of either true-false, matching or multiple-choice items and get at least some marks, a fact which makes the examination absurd. And even in the subject

* The term validity means that a test should measure that which it is intended to measure; it should measure nothing else.

known by a student, he is likely to achieve a much higher score in an objective examination than is warranted by his true achievement. In a test of 100 true-false items, a student can mark 50 items correctly by following the advice of a tossed coin.

It must be admitted that in objective type items, the danger of guessing is inherent and is great. But it can be argued that bluffing can be done, and is being done, by students. The question to be considered is: who does bluffing? Not necessarily all students. Students who are well-prepared for examinations and who know the answers well or fairly well will not even dream of bluffing. It is those students of poor calibre and of indifferent learning that do bluffing, and this they will do in any case whether the examination is of the essay type or the objective type.

For the objective testing, various statistical formulas have been developed to correct the effect of bluffing and guessing, and, therefore, this external chance factor is minimised to some extent. But nothing has been offered by way of correcting 'bluffing' in the essay made examinations. However, it is mightily true that the problem of bluffing or guessing cannot be entirely eliminated by mechanically applied statistical formula. We cannot change the course of human behaviour, not to the fullest extent and in every case. Guessing and bluffing will remain. However, it can be reduced by checks and fore-warning. Students can be advised not to guess or bluff and if they do, their final marks will be equal to items marked correctly minus items marked incorrectly. With all these said and done, it must be conceded that the objective tests provide a more scope for guessing and copying, too.

PRETEST OR MOTIVATIONAL EFFECTS

Remmers and Gage break this criterion of comparison between the essay and objective type questions into two sub-criteria, viz. (1) the suggestive effect of the incorrect or partially true materials constituting some objective type questions such as true-false, multiple choice etc., and (2) the potentialities of both the types of questions in increasing students' achievement. Let us apply both the criteria to both the types of questions.

The objective type questions are the recognition type questions wherein certain possible answers are already provided and the examinees are asked to mark out the true statements or select the correct or the best from the suggested possible answers or match

the correct pairs. Each of these kinds of questions will invariably contain one correct answer and all other incorrect answers. This does not happen in the essay type of the question where the examiner has to supply his own answer. The question is whether the wrong statements included in an objective question leaves any untoward effect on the examinees' minds—implant misunderstanding and strengthen their already existing misconceptions.

Some research has been done on both these aspects in American Universities. This is an unexplored research field in India. Ruch's summary of research on this issue shows that there is little psychological basis for such misapprehension about the distorting mental effect. Ruch says that "the small amount of negative suggestion is fully offset by an even greater positive suggestion, leaving a positive net effect." Thus, there is not only no harmful effect of the wrong statements included in objective questions but, on the contrary students "learn more than they lose by taking true-false tests."

However, the large-scale use of the new type tests—the objective tests seem to hamper students' skill in expression. T. L. Kelley and A. C. Krey have commented on the impairment of this skill by the objective test as a detriment in comparison to the essay question.

The essay test is deemed as a better motivator and a better instructional device for developing the skill of expression. However, the skill of writing coherently and cogently is so important that it cannot be left to be developed accidentally through responding to essay questions in an examination hall.

In conclusion, it must be said that both the objective tests and essay tests can have distinct positive effect on student achievement, but each in its own distinctive manner. In the words of Remmers and Gage, the instructional value of the essay test is for the highly important ability to marshal and organise ideas with a minimum of outside help; the instructional value of the short-answer (i. e. objective) test can be aimed at the wide variety of other objectives that can be tested in this form." These other objectives are: development of understanding, critical reasoning, interpretation, application, perceiving and establishment of relationship, etc.

LABOUR REQUIRED IN CONSTRUCTION

Labour required in preparing tools of examination is a vital practical issue. Most of the university examination question papers in a subject field are prepared at the joint meeting of paper-setters. Questions for each paper are to be prepared and written out in not more than 4 to 5 hours altogether. In some universities where the medium is the regional language, paper-setters are required to give both the English and the regional language versions of each question in each question paper. This work itself is time-consuming. Even the making of a fair copy of each question paper takes time. Very often the external paper-setters coming from outside places are in a hurry to catch some particular train to return home. So, the time factor proves to be very crucial. There is hardly much time for deep thinking and discussion. Most of the paper-setters bring with them some questions hurriedly scribbled by them or copied down from previous examination papers.

When the above stated situation prevails, the only form of questions that is feasible is the essay type questions. Essay type questions can be prepared mechanically, with minimum thinking. *There is not much labour or time required.* But each objective item requires great mental effort and good portion of time from the examiner. Good objective test items cannot just be written out. They all cannot be prepared in one sitting of 4 or 5 hours. It is said that one good objective type item requires one hour to construct it. If sixty objective type questions are to be prepared in one paper, it would need considerable time. And in almost all examinations there are a number of question papers. One cannot think of the days required for preparing an examination of 4 to 6 question papers, each consisting of 40 to 60 objective questions. Ruch has shown that the essay questions call forth less than half the knowledge the average student actually possesses, but requires twice the time to do it.

Again, good objective type questions can be prepared only when teaching is going on. A teacher will get ideas about writing a test item of an objective type when he is teaching, when he is conducting tutorials and seminars, and when he is correcting students' sessional written assignments. In a question of a multiple choice variety, one correct or best answer and four other foils or distractors are to be thought out. Distractors depend upon students' misconceptions

and wrong understanding. One will get the ideas for these misconceptions only when one is actually dealing with students in classroom. One cannot expect such ideas to occur to him when he is at the paper setters' meetings. Structuring and framing of good objective questions will require patience and searching thought.

The conclusion on the relative merits of the two tools in respect of labour and time expended on construction is, that the essay questions require far less time than the objective type questions. However, good quality essay questions would require more time than poor or average quality essay questions. Even then the amount of time will be less in the case of good quality essay questions than even on objective questions of average quality.

LABOUR REQUIRED IN SCORING OR GRADING

In this case, the superiority of the objective tests to the essay test is so clear that it needs no elaborate argument in its support. Objective tests have all fixed and almost fool-proof answers. They can be scored rapidly even by those who do not know the subject field. In objective questions, answer-keys are prepared which can be used in marking correct or wrong answers, by even a school pupil or the elementary school trained wife of the examiner.

There are mechanical devices for scoring objective type questions. The hand scoring key is one such simple improvised device. The IBM Machine scores three to five thousand objective test answers in an hour or so. The IBM machines do simple statistical calculations in regard to the marks of the objective tests. It is said that while an objective test may require ten hours for construction but perhaps only one hour for scoring, but against this an essay test may require ten hours for scoring, though it may be constructed in, say, less than one hour.

In the matter of labour required and ease in scoring or grading, the objective test is vastly superior to the essay test. That is why it is contended that if universities employ objective tests partly or fully in their examinations, the results could be declared one month earlier than is the case at present.

COST OF ADMINISTERING

India is a poor country. Indian universities, by and large, suffer from recurring huge deficits. The expenditure of teaching universities on examinations usually constitutes four to five per cent of their total annual expenditure. This percentage is likely to be

more in the case of affiliating and teaching universities. The factor of cost of preparing and administering the examination is, therefore, an important and critical issue.

On an average 6 to 10 essay type questions are asked in one question paper in the university examination. This can be printed on a single leaf of a quarter paper. As essay questions can be prepared rapidly and as their construction is not time-consuming, the cost of holding the paper-setters' meeting, and the payment of remuneration to paper-setters are not much. Hardly a paper-setter gets more than Rs. 100 for paper setting—it is usually round about Rs. 60.

But, if the paper-setting is to be done partly in objective tests, the cost of setting papers will rise to two or three folds.

Whereas, the essay tests are less expensive in construction, their printing and administration at an examinations are very expensive. It depends upon the number of students appearing at an examination. Usually, the examination and scoring work is five to six times more expensive than the paper-setting.

In the case of objective tests, the position is reversed. In their case the paper-setting or construction of questions would be five or six times more expensive than their scoring or marking.

But, in the ultimate analysis, the cost of the paper-setting, printing, administering, scoring, tabulating the results, etc. in the case of both the essay test and the objective tests should come out to be approximately the same. It should, therefore, be observed that in the factor of the cost of administration neither of them can score over each other—both are almost equally expensive.

ATTITUDES OF STUDENTS

It is interesting to examine the results of studies on the attitudes of examinees towards both the essay and the objective type tests. Unfortunately, this is also an area of research mostly neglected in India. The real difficulty lies in the fact that both the types of tests—especially the objective type questions are not used sufficiently on a large scale to facilitate planning research thereon. In the U.S.A. two researches, particularly of E. S. Jones of the Chicago University and C. W. Odell are interesting in the context.

The findings of Odell's investigations seem to suggest that students, realizing the large measure of subjectivity and unreliability of the essay type questions and examinations do not have

favourable attitude to this type of tests—in fact, quite many regard essay type questions and examinations unjust and unfair to the student community.

Jones' findings are different. We would do nothing better than quoting his actual words, 'I think one's ability is better shown through discussion questions than through short objective questions,' was agreed to by 68 per cent of the students in colleges which gave senior comprehensives, and 55 per cent of the superior students in other colleges. Alumni taking both the types of examinations offered even more favourable comments on the essay test, because they felt that it was more important to be able to discuss an issue than merely check it." A. C. Hanford of the Harvard College arrived at a similar conclusion from a study of the system of examination at the Harvard College, viz. that the undergraduates favour the essay examinations, that is to say, reasoning and speculative type of examinations. Some of the small scale stray studies done in India reveal that while at some places students have welcomed objective type examinations at other places they have opposed it. But the over-all feeling among them is more favourable to objective type tests because they have found this examination more fair and just to the student community.

G. M. Ruch in his survey of studies, entitled '*The Objective of New Type Examinations*' has remarked that his survey revealed that students regard both the essay and objective examinations as 'unpleasant tasks'. If a similar study is attempted in regard to the students of Indian universities, perhaps a similar or at best more pronounced verdict to that effect will come forth. Indian students, too, do not like examinations. In fact, some of the recent events in some Northern universities show that students like to pass examinations with as little botherations to their own selves as possible.

Attitudes are not innate, but they are learned. Therefore, whether students develop favourable or unfavourable attitudes to objective or essay questions would largely depend upon the nature of experiences. Students would get about both the tests—how effective, how frequently and how fairly they are used. An objective test is usually a fair test. But if it is badly constructed so as to encourage large-scale bluffing, or if extensive copying is done in its administration, then students are likely to develop an unwholesome and unfavourable attitude to objective test questions. We

should, therefore, take all the necessary precautions to the effect that students' feelings in regard to any of the two types of questions do not get formed into a complex for or a prejudice against it. "Teachers can probably shift these attitudes in either direction according to the skill and wisdom they apply to using the two kinds in their classrooms."

INTELLECTUAL PLEASURES DERIVED AND PROFESSIONAL GROWTH ATTAINED

Making of examinations or tests is usually regarded as a mechanical, dull, and uninteresting job. Nobody likes examination—neither teachers nor students. If teachers like examinations, it is because the paper-setting and examination of answer-books bring some additional income for them. But, apart from the additional money earned, they hardly enjoy it. This is rather unfortunate and sad. If pleasure can be derived from teaching, it can also be derived from testing, especially in preparing challenging type examination assignments—question papers.

The issue is, which type of examination tools—the essay questions or the objective questions bring for the teachers more intellectual pleasure and bring about, in a greater degree, their professional growth on the job? The answer naturally is the objective questions. Objective questions are very difficult to construct. They require a penetrating mind, deep scholarship and a very good understanding of the students' minds as well as their achievement or knowledge. Whereas any teacher, even a raw one, can prepare a fairly good essay examination, it cannot be said so in the construction of an objective type test. The latter needs considerable deep and critical thinking on the part of the paper-setter, a thorough study of the subject matter, a critical examination of the various testing possibilities of the subject content, creative thinking regarding various test-situations that can be validly and effectively used, and so on. All these are intellectual processes through which a paper-setter has to pass. The construction of a good objective test is as creative a work as composing a poem, writing a story, painting a picture or sculpturing a statue. The person who constructs an objective test, derives, or at least should derive, great intellectual pleasure. He attains his professional growth in the very process of preliminary preparation for constructing objective tests. He reads, he examines, he reviews, he supplements his understanding and knowledge of the subject-matter, about the working of the

student's minds and the use of the examination tools and the techniques. This whole process results in the professional growth of the teacher—the paper-setter. The well known British psychologist P. E. Vernon's description of the professional growth that takes place in the teacher who constructs objective tests is worth citation :

"The setting of a new-type test is a fascinating occupation, which can be done in odd moments throughout the year; and marking is simply a routine matter which involves no mental strain. By contrast, the marking of large numbers of essay type scripts in psychology is the most trying work that he has ever had to do."

DISTORTED EFFECT ON MANIFESTED ACHIEVEMENT

Here, the factor or the issue is whether the essay test or the objective test provides a scope, and if it is so, which does it to a greater extent, for bringing in such extraneous effects in the examinees' achievements which are in no way related to their real attainment or knowledge. These extraneous effects are the use of intelligence rather than the possession of real knowledge of the subject matter, the halo effect of the flourish of language and the glamour of written expression, test sophistication, etc. These effects, rather than achievement or knowledge at large determine the examinees' correct responses. These effects distort the evaluation of the real achievements of the examinees as coloured glass distorts the real vision of things.

Evidently, by the very nature of the types of the tests, the essay test suffers more from such extraneous effects than the objective test. The essay test is largely a language test. Here, the vocabulary, the mastery over written expression, the skill of making and using effective sentence-formation, handwriting, ability to organise a thought coherently, speed of writing, etc. are the factors that affect the eventual marking or grading of the examinees' answer scripts. These extraneous halo effects influence scoring or grading to a greater extent at the university stage than at the school stage, because at this stage the students have acquired greater mastery over the use of the language.

This does not happen much in the case of objective tests, as the answer in respect of each question is definite and short, very often in the form of a tick mark; the language factor plays practically

no part in the sense in which it does in the case of the essay test. However, even in the case of objective test, the language does play a part. Every objective question is preceded by directions which, unless are understood well by students, the responses are likely to be incorrect. Many objective questions, that are hurriedly and carelessly prepared, carry irrelevant cues which give out the correct answer without the examinee possessing the real attainment in the subject matter.

Thus, both the essay questions as well as the objective questions suffer from the distorting effect on manifold achievement. But even then, the essay question is a greater defaulter or culprit.

Again, objective tests are not altogether free from other distorting effects. The UGC Committee of 1962 on Examination Reform has noted this ill-effect of objective tests. It has said, "It is noteworthy, in this connection, that in the United States of America where such (objective) questions have been rather widely used, there is considerable concern over the vicious influence that objective testing has exercised over the selection of curricular content, the methods of teaching and the study habits of students. Both the students and teachers have been not seldom found to respond to the objective test by developing "test wisdom". This includes the use of "guess-papers", cheaply-made easy notes and confining oneself to a reading of the texts from which the test items are expected to be culled." (Report, p. 36)

FITNESS FOR EVALUATION OF COMPLEX ACHIEVEMENT

It is popularly held that the essay test is the best measure of evaluation of complex and intricate student achievement. Objectives like critical reasoning, applying acquired knowledge to new, unforeseen situations, establishing relationship between the known and the unknown skills of judgment, skills of interpretation, ability to do creative work, poetry and art appreciation, etc. cannot be validly evaluated by any other testing tool or device than the essay question. The UGC Committee of 1962 on Examination Reform has accepted the claim of the essay test as a fit tool to measure complex achievement. "We consider that the essay type is perhaps more suitable than other types for testing the ability of the student to have an integrated and connected view of some parts of the subject and also whether the candidate is able to exhibit his knowledge in a constructive and intelligible form". (Report p. 34)

The science of objective testing has developed very much during the last decade or two. Testing organisations like the Educational Testing Service (ETS), Princeton, the Scientific Research Associates (SRA), Chicago, the Psychological Corporation, New York, have developed such objective tests that can test most of the complex achievements that are now being measured by the essay tests, and they are more reliable and valid tools of measurement and evaluation than the essay test. J. Murray Lee has found "objective tests as one of the best means of testing judgement that is available." E. F. Lindquist has asserted that "it is definitely superior to other types for measuring such educational objectives as inferential reasoning, reasoned understanding, or sound judgment and description on the part of the student."

Tests of Multiple choice type are developed recently in the U.S.A. for testing written expression, appreciation, creative composition etc. The Paper entitled "*The Multiple Choice Test—A Close Look*" published by the Educational Testing Service, Princeton, U.S.A. gives a number of examples of multiple-choice test items that can measure extremely complex mental processes and achievement. Similarly, the Yearbook, "*The Measurement of Understanding*" describes in great details with copious illustrations the techniques that can be used in objective test construction for evaluating higher mental processes in various curricular fields.

Thus, it will not be true to say that the essay test is distinctly superior to objective test in the measurement of complex achievements. Both can do the job equally well. But to construct such essay questions is easier and less time-consuming than constructing such multiple choice tests.

CONCLUSION

In conclusion, it might be said that the objective test has an edge over the essay test as a valid and reliable tool of measurement and evaluation of student achievement. Following H. D. Rinsland, we might say that "the objective tests, with probably the exception of the true-false type, are as valid as, or perhaps more valid than, the essay or subjective examination."

The objective test carries further advantages over the essay test in the sense that it is possible to know precisely the difficulty index and the discriminating index of each question. With the

knowledge of discriminating indexes of a large number of questions it can be easier to decide which of the items that discriminate well between students who 'know' and 'who do not know', are to be retained in the examination paper, and with the help of the knowledge about their difficulty indexes, each item in a test can be graded, on a scale from simple to complex or difficult. These are no small gains from the point of placing examinations on scientific lines.

The following observation by F. N. Freeman makes a suitable concluding para of a study like the present one:

"I would not cast out the objective tests on which so much ingenuity has been expended. They have their uses. I would, however, protest vigorously against the casting out of what is contemptuously called the essay examination. I suggest that we recover our balance confining objective tests to those uses to which they are fitted, and restoring the free expression of thought to the position which it deserves."

OPTIONAL QUESTIONS IN COLLEGE AND UNIVERSITY EXAMINATIONS

Among a number of practices in college and university examinations handed down by tradition, one is that of the optional questions. Provision of optional questions in every college and university examination has become such a routine and a natural phenomenon that any voice raised against it appears strange and ludicrous. A question paper without options appears strange rather than that with options.

POPULARITY OF OPTIONS

Provision of option is popular with both paper-setters and examinees. Paper-setters prefer providing options because thereby a wider coverage of the course content is ensured. They find it easier to prepare a question paper with options rather than without them. It is sheer weight of tradition.

A study of the instructions laid down by universities to the boards of paper-setters in their examinations shows that options roughly to the extent of 50 or 60 per cent are usually prescribed. This is as a matter of routine.

Options are quite popular with students because they permit the selection of certain units or the portion of the content matter for study and also for omission. It makes the students' work of preparing themselves for examinations easy because they can safely omit a certain portion through options.

The following are some typical reasons revealed by studies to find out why options are deemed necessary and why they are so popular.

James Stalnaker has found years of tradition behind the practice and popularity of options.

E. S. Jones of the Harvard College has found two main considerations behind the wide use and popularity of optional questions.

viz, substituting reading with interest for cramming and students' natural desire to write on particularly stimulating relationship. He has found out the third additional factor, which is that 'the examiner is interested not in the particular subject the candidate chooses as his vehicle of expression, but in his method of handling a subject'.

Stalnaker has further found two factors at the root of the wide-spread use of the optional question, viz, the desire of the university teacher to have an increased number of questions as it would represent his course better, and the happiness of the students at the provision of options makes examinations easier.

A K Gayen has found that when the general ability to write correctly is the objective to be measured, and when the fact or facts involved are not important, alternative questions are found to be more helpful by teachers and examiners.

Walker Hills finds that purposes such as public relations are attributed to the wide use of optional questions.

C W Odell has found an argument frequently used to support optional questions in that they cater to individual differences among the examinees very well. But this is a doubtful argument.

These are some of the causes of the wide scale use and popularity of optional questions in examinations found by research workers. In India, too, these arguments prevail. But perhaps the reason why optional questions are very widely used in university examinations in India is the effect of the traditions and practices of the renowned Oxford and Cambridge Universities on the university life and practices in India. Many of the Cambridge University examinations direct the student to "attempt six questions" of the twenty or more given, many being in the form 'Answer either a or b'.

In the examinations of Indian universities, the tradition and practice of alternate or choice questions have become so deep-rooted that any serious attempt to change it abruptly will bring forth strong protest, and even revolt, by the student community. Looking at the present mood of university students in India, this change appears as likely to provoke strike and strife by students. But the change is educationally desirable. An examination with optional questions is not a reliable and valid examination, and the results yielded by such an examination are not fair and just to all students.

WHY ARE OPTIONS UNSCIENTIFIC ?

We will briefly note the reasons why test technicians and examination experts regard the widely spread current practice in giving optional questions by Indian universities as unscientific :

- Shri M. D. Devdasan says that in objective scientific examinations, the measuring scale for all the examinees should be one and the same. The provision of choice for questions leaves it to the individual candidate to decide the measuring scale on which he will be assessed.
- J. M. Stalnaker says that the tacit assumptions that optional questions are intrinsically equal and that they can be graded with exact comparability are patently false and are usually admitted so.
- Examination questions are intended to measure a student's knowledge of a large field. The assumption made here is that if examination questions sample the course-content well and if a student performs well on the sample, it can be safely concluded that he has known the course-content well. But the real rub lies in the fact that the examiner cannot know without a proper try-out whether his questions have sampled the course content well and if a student's knowledge is "less well balanced, that is, if he knows a great deal about a few topics and very little about many others, he will deceive the examiner if a wide range of optional questions is used.
- In the usual university and college examinations, little is known of the relative difficulty values and discriminating values of each optional question. It is very difficult, may be even impossible, for a paper-setter to construct alternative essay type questions that are equally difficult or easy, equally valid, equally time-consuming, so that when graded, their scores are equal and comparable. And, therefore, it is impossible for the examiner to be fair and just to all examinees by providing optional questions in his examination paper.
- Optional questions make examination a hit and miss chance affair.
- A. K. Gayen has advanced the following arguments against the setting of alternative questions :
 - (1) If this topic or that topic is not important for measuring writing ability, alternative questions are superfluous.
 - (2) The argument that greater opportunity is given to candidates in choosing his subject does not hold good, because

- through bad judgment a candidate may not hit upon the best choice, that is, the topic on which he could write best.
- (3) Increase of the number of alternatives, when the number of questions to be chosen is small, would encourage cramming as the student memorizing a selected number of questions would be surer to get his choices.
 - (4) If the candidate is to choose his own topic from among many given by the paper-setters, it may be that he may present something prepared beforehand when he could write nothing at all on any other topic which he had not chosen.
 - (5) It is very difficult to discriminate between students who can answer just the required number of alternatives and who are capable of answering many more.

— Walker Hill refutes the argument often advanced by Indian university teachers that the provision of optional questions ensures a wider coverage of the syllabus. He says, "This extended coverage is quite unreal, however, for it does not extend the coverage by students".

Thus, the expert opinion in the field of educational measurement and evaluation is against permitting choice among questions. They emphasize the fact that it is only by requiring all students to answer all the questions set in an examination, that the comparability and fairness of examination results can be ensured.

CONCLUSION

Thus, from a scientific view-point, the practice of offering options makes the examination paper a loose tool for objective evaluation of the students. In options different students are not taking the same examination. Students do not make better preparation for an examination when they expect an option. In fact, they tend to omit certain topics which they plan to cover up under options. Therefore, no portion of the questions in a paper should be optional.

Though the practice is not academically sound, we should go cautiously, slowly, steadily, and above all tactfully, in changing the practice because the student community as well as people at large are habituated to options. The practice is much more common for essay tests than for objective tests.

We should move slowly, step by step, in this examination reform. First, we try to do away, 'answer any 6' type of over-all options, but continue with 'answer a or b' type of internal options for some time. Then, gradually options are to be eliminated entirely.

INTERNAL ASSESSMENT IN UNIVERSITY EXAMINATIONS

INTERNAL ASSESSMENT

One of the vital reforms in university education that appeared to be around the corner at one time in some of the Indian universities is in the process of being pushed back. That reform is the introduction of internal assessment or college marking in university examinations.

The Radhakrishnan University Education Commission in 1949 had recommended gradual introduction of internal assessment in the university examinations at all levels.

Recently, the Kothari Education Commission has also regarded assigning weightage to class records and internal marking by colleges and university departments in the final university examinations of students as an essential step towards vitalising evaluation in higher education.

The bulk of research done and seminars and workshops organised on examination reform between 1949 and 1969 have emphasized the speedy adoption of internal marking as a means of raising the validity of university examinations.

Despite this, the resistance to the adoption of internal assessment procedures in university examinations has been growing in recent years in extent as well as in intensity. The resistance is evident not only among the members of university governing bodies but also among college and university teachers. It appears that many of our universities are not likely to have the benefit of this reform at least for some years to come.

WHY RESISTANCE ?

Those who are opposing the introduction of internal assessment in university examinations are not against the great educational principle involved in this reform.

They do recognise the fact that students' ultimate fate in their year-to-year studies cannot, and also should not, be decided by one single final annual examination called university examination. They agree that students' day-to-day progress should be adequately taken into consideration while deciding final grades in the examination.

They also accept the plea that the system of internal assessment would lead to regular study habits among students all throughout the year and would markedly improve upon the present situation wherein students burn mid-night oil only in the last two or three months prior to the dates of the final university examinations.

Their opposition to the reform lies in their apprehension (in the case of many) and firm conviction (in case of some) of the mal-practices that will be indulged in by college and university teachers, and of the reform being exploited to distribute favours, or derive monetary gains through dubious means, or to wreck vengeance on students who will not toe the lines of their teachers.

Thus, the main opposition to the reform of internal assessment boils down to the fact. If mistrust of teachers, suspicion about their honesty and the lack of faith in their integrity. This is indeed a painful thing. It is all the more painful because teacher-leaders of colleges and university departments and university governing bodies are not prepared to trust their own colleagues and co-professionals.

SOME OF THE FEARS

The wide-spread practice of private tuition which has been so far the bane of school teachers, has been spreading among college teachers also. It is said that the business is quite flourishing in the case of teachers of English, Science, Mathematics and of Engineering subjects.

It is alleged that students are charged exorbitant fees for private tuitions

The unexpressed understanding with students, of course, is that they get a good class so as to qualify for admissions to degree courses in science, engineering and medicine, the three of the most persistently sought after fields.

It is difficult to accept the contention that college teachers are involved on a large scale in private tuition work and utilise such engagement for pecuniary gains.

It is also difficult to accept the charge that 'most of the teachers do private tuition and that they are corrupt. There may be some black-sheep among teachers. But such black-sheep are to be found in almost all walks of life.

IMPROVE PROCEDURES

Because some teachers are dishonest and they misuse their autonomy to give a high grade in tests to students whom they teach, the good reform of internal assessment should not be thrown out over-board.

What is really needed is to set-up good traditions and build up a high staff morale. This is something which a dynamic, democratic and creative college principal or the head of a university department should do. Firm, vigilant and persuasive leadership can work miracles in this respect.

There should be a two-way process to effect improvement in the situation. College and university teachers should be introduced to modern tools and techniques of assessing student achievement and growth on scientific lines. Staff seminars and workshops are excellent devices for in-service training of college teachers. Let us use them!

Cases of extreme variations between students' marks in internal assessment and in final university examinations can be investigated. The defaulters could be disqualified for being university examiners. We should do this firmly.

The marks of internal examinations can be converted into standard scores. Standard scores iron out variations in marking done by individual teachers. They provide a fairer basis for combining marks from several tests to determine a student's over-all performance. Their use provides an accurate method for comparing a student's performance on one test with his performance on another.

LET US NOT KILL THE REFORM

Let us not kill the excellent reform of internal assessment. This reform is tried out with great success in some of the Faculties of the Baroda University, like the Home Science,

Education and Psychology, Social Work, and Fine Arts Faculties with substantial improvement in student learning

The need of the day is to try out a number of innovations with honest faith and to improve them through constant vigilance, action research and evaluation

The experiences of the Baroda University should form a starting point for other universities to launch a similar experiment.

We can improve upon the reform of internal assessment in a planned way !

EXAMINATION REFORM IN INDIAN UNIVERSITIES AN ACTION PROGRAMME

Mark Twain once wittily remarked that everybody talks about bad weather but nobody does anything to change it. The same is poignantly true about reforming the examination system in operation in our schools and universities. Ever since the days of Lord Curzon who was the architect of the first University Education Commission (1902) in India, we have been talking vehemently and stressing the urgency of the need for placing our examination system on a sound, scientific basis. A number of Committees and Commissions that were set up to suggest the reorganization and revitalization of our education have probed the ills of the prevailing pattern and practices of our examination system in a penetrating way. They all have made very helpful and practicable recommendations to revitalise and renovate our examinations. A large amount of research data (from studies by Taylor, Harper, A. K. Gyan, Das, Dave, Lele and others) both in the country and also abroad are also available to us which reveal the specific areas of weaknesses of the present examination practices and which provide extremely useful directions, dimensions and concrete guide-lines for their improvement. But despite all these, we have made little advances in improving the tools, techniques and practices of examining students and reporting the outcomes over the period of the past seven decades. In this matter particularly we are far behind, as Dr. Edwin Harper recently pointed out in a Symposium held at the Aligarh Muslim University (December 16, 1969), the South-East Asian countries over which otherwise we are far ahead in several other educational developments.

PROBABLE CAUSES

What are the probable reasons for this sad lack of dynamism, earnestness and adventurousness on the part of our university

administrators, academic bodies and teachers? They have not been able to move vigorously, resolutely and in a sustained manner to repair and replace those aspects and areas of the university and college examinations which both their own accumulated experiences of several years and the vast amount of studies and research have revealed beyond doubt as faulty and damaging to the cause of our education. When it is considered that in India (after the authority of Dr. B. S. Bloom who visited India in 1958 and 1960 and who studied the problem of examination reform both at the school and the university stages) one out of every three who fail every year in university examinations, does so primarily because of the faulty nature of purposes, design, tools and procedures of examinations, one should be shocked at the colossal wastage the present examination system leaves behind in our educational system. Reform in examination should be accorded the top-most priority in the complete shake-up of our educational system. -

Very few studies and researches have been directed in India to probe and fathom the determinant causes of this passivity, resistance, and almost the stoic acceptance of the continuing traditions in the examination field.

There seem to be five major variables involved in the improvement of examinations. They are : (1) university bodies which are concerned with making policy decisions, (2) examiners, (3) examination, (4) examinees, and (5) the faith, earnestness and dynamism of the administrators who administer and control university examinations. These five variables are further affected and aggravated by some cultural, sociological, psychological and attitudinal influences.

The Indian society, as some sociologists say, tends more than most of the Western societies to cling to the continuity of past traditions and conventions built into it. The present examination system has been the legacy of the British and has been internalised into our behaviour pattern in the last century and a half. This makes it difficult to change it even though most of the universities in the U. K. have now completely broken away from their past tradition and practices in examination. This built-in tendency to favour and cling to the past practices is one major cause why we have not been able to change significantly our examination system.

Secondly, Government and the other employing agencies as well as the society at large have attached high values to university

diplomas and degrees. Any change or break-through in the examination and evaluation procedures tends to create a fear in the minds of all those who are concerned with taking, giving, evaluating and using (through employment) university degrees about a possible devaluation of degrees and a consequent fall in their market value, if some of the formality, rigidity and strictness associated with the current examination system is done away with through measures of reform.

The administrator on the one hand, and the examiner, examination and the examinee on the other, are integrally linked up in the evaluation process. Both the administrator and the examiner do not possess, at least for the present, adequate skill, attitude and insight into preparing and administering a scientific, valid, reliable and productive programme of examination reform. When the skills and competence are lacking, the attitude gets stiffened and resistance becomes stronger on the part of administrators and teachers. This appears to be the third probable cause.

The fourth probable cause arises from financial and economic factors. As the reforms in examination such as internal assessment, the use of objective and other tools of measurement that are being advocated, are likely to affect the already over-strained finances of colleges and universities, the extra incomes of teachers and the expenses of students and parents, these reforms are either opposed or postponed.

The Indian society is sometimes accused of by sociologists as an institution suffering from a feeling of defeatism. Indians take many adverse and difficult things for granted. They accept that many things, though desirable, are difficult and, therefore, very little can be done to achieve them. This tendency to yield to and reconcile with difficulties and problems instead of combating them and overcoming them—a kind of dynamism and militarism—is lacking in the majority of Indian educational administrators and teachers. This appears to be another cause of our defeat on the front of examination reform.

The lack of any organizational set up at the Centre which can provide forward-looking leadership and supply dynamism and direction to the movement of examination reform in Indian universities is also another major cause of this passivity in regard to examination reform. Of course, the U. G. C. did help in setting up Examination Reform and Research Units in some

universities. But mere formalised researches on the validity and reliability of university examinations with little or no programme of a feed-back in the system itself and no leadership and service functions performed by such units achieved very little by way of actual reform in the system.

The administrative set-up in our universities also has been allowed to remain unchanged. The staffing of University Examination Sections remained such that only routine work in regularising and strengthening the administration of examinations can at best be achieved. The Registrars for examination did not (and in most cases do not even now) possess the understanding, skill, attitude and interest to be able to attend to the educational aspects of examination reform. They were, and are, ill-equipped to play the new role. This has operated as another big hurdle to examination reform in our universities.

Teachers want simple, straight-forward examination tools and procedures which they can prepare without taxing much their ingenuity and without being required to spend more time on it. But there are no short cuts to the preparation of technically valid and reliable tools and procedures of measurement and evaluation. The magic tricks of the construction of scientific examination in a short time cannot just be performed. The experience of people who are concerned with preparing objective type test items, assignments, rating scales and such other unconventional instruments of examination has been that they cannot be prepared at the traditional meetings of paper-setters. Their development demands continuous and long-time thinking; the testing situation very often occurs at the time of teaching or tutorials and seminars with students. The administrators, too, want such examinations which can be quickly set and do not require much elaborate and time-consuming procedures for administering them. This tendency to put a premium on quick and simple examinations is also another cause of little or half-hearted advance towards the reform of university examinations. This seems to be the seventh cause.

In India educational research and educational practices have hardly gone together. Very rarely the findings of research have been fed into educational practices with a view to improving them. Those who control educational practices wield authority and the power of decision-making. They dictate or recommend changes and reform. Their stand and attitude very often is that of bene-

volent authoritarians. The consumer and the adoptor is merely at the receiving end. He has little involvement in decision-making. The administrators hardly bother about research findings. And when they do bother about research, it is just to draw on such research as would corroborate their acts or views. An eminent Indian sociologist has observed, "If innovators are not adoptors, as it happens in a centralised line-authority system, the process of innovation-diffusion takes the form of an authoritarian or dogmatic pattern of one-way communication, resulting in the innovator either becoming theoretical or an authoritarian bureaucrat". There is almost a lack of research attitude among educational policy-makers and administrators. So, despite a fair volume of research on ills and improvement of examination developed abroad and in India, very little of it has gone into the improvement of the system. Therefore, this lack of feed-back from educational research into educational practices and the too much leaning on one way communication on the part of educational administrators and officers is the eighth cause.

We can go on like this, analysing the present situation in respect of examination, and stress many deterrents of reform and progress in our examination system. But remedies and a programme of reconstruction based on the realities revealed by such diagnosis are more important. So we consider some of the measures which can and should be taken to put our examinations on a sound, scientific basis.

ACTION PROGRAMME OF REFORM

On the basis of the foregoing screening of the nature of the dominant barriers to the speedy progress of examination reform in the Indian universities, we can formulate some proposals of a nature of some kind of an action programme. We reiterate, that in the process of examination reform, there are five principal variables to reckon with. They are : the administration, the administrator, the examiner, the examination and the examinee. Each one presents formidable problems that are psychological, sociological, economic and educational. The proposals for examination reform in universities should cover all the five variables and they should envisage measures of definite improvement in terms of improved organizational set-up, development of technical skills (through a programme of training) in relation to making, marking or taking examinations as the case may be.

EVALUATION UNIT IN THE U. G. C.

One of the major causes of slow and inadequate examination reform in Indian universities has been an absence of an effective central organization which can provide a forward-looking and dynamic leadership to individual Indian universities, and support their efforts through the assistance in terms of men, materials and money. It is an undisputed fact that the establishment of the University Grants Commission and the consequent provision of financial support and educational leadership by it have gone a long way to bring about a tremendous expansion and improvement in Indian universities and colleges. Thus, a Central Organization, if it performs the functions of leadership, co-ordination and financial support to several local units spread over the country, can succeed in effecting a break-through and reform. Therefore, if a Central Examination Reform or Evaluation Department is established as an integral part of the U. G. C., it would constitute the first very effective step in the directions of university examination reforms. The Department should be accorded a high status and it should not be merely a little cell or an unit in the U. G. C. as suggested by the Kothari Commission. It should be headed by a university professor and not an administrator loaned from the Union Ministry of Education to give him the benefit of promotion. This Director of the U. G. C. Evaluation unit should have an extensive experience of teaching under-graduate and post-graduate classes. He must have good research know-how and experience. (He need not be an eminent researcher). What he should excel in are the functions of dynamic leadership, effective communication, organizational skill in setting up programmes of in-service training for the personnel of Examination Departments of individual universities.

This Department should have a number of Field Evaluation Officers, some of them possessing research expertise, some good at organizing and giving in-service education in the techniques, procedures and reporting of examination results, but all of them having sound background in at least one group of subjects taught at the under-graduate level in our universities.

Thus, the proposed U. G. C. Department of Examination Reform will have five major functions : (1) Serving as a clearing house on latest developments, research and thinking on examination in universities abroad and in India; (2) co-ordinating the plans and programme of examination reform through the Semester

System, Internal Assessment, etc.; (3) service to universities in providing guide-lines and help in streamlining and strengthening their examination tools and procedures; (4) pragmatic action on problems of common concern to universities which can actually be fed into their examination system with a focus on improving them, and (5) providing financial support for setting up a Department of Examination for introducing the Semester System and Internal Assessment, for the in-service education programme of the university teachers in the preparation of improved tools of examination and the adoption of more modernised techniques and procedures of examining and reporting the outcomes or results.

In the matter of organising a Central Department of Examination in the U. G. C., we can learn a lot from the achievement and failures of the Central Evaluation Unit for Secondary Schools and Secondary School Boards that have been in operation in the National Council of Educational Research and Training for over a decade. There is no denying the fact that this Unit has contributed substantially in creating a climate for better examinations in the State School Examination Boards and in about 30 to 40 per cent of secondary schools. The Kothari Education Commission, too, has paid a tribute to the work of this unit. It is, therefore, worthwhile to set up a central organization that will give an edge to the movement and the campaign for examination reform in Indian universities.

UNIVERSITY DEPARTMENTS OF EXAMINATION

The next step would be to reorganise the set up in individual universities for conducting examinations. The prevailing practice in most of the Indian universities is to have an Examination Division or a Section in their administrative building. This Section is headed by a person called either a Registrar (Examination) or an Assistant Registrar (Examination). This Section attends to everything pertaining to different examinations instituted in the university, from receiving applications of students for appearing in an examination to the publication of examination results and the issue of certificates of marks, etc.

The person heading this Section is primarily an administrator. Neither he nor his staff has understanding as well as concern for the quality of examination techniques, tools, procedures and students' answers. For them, these items simply do not exist.

This kind of set-up is all right for a rigidly and narrowly conceived programme of external university examinations. It is also all right so long as we regard teaching and examination as two distinct functions, done in two different kinds of establishments; viz. departments or colleges providing instruction and the university Section of Examinations.

But now a new philosophy of examination (evaluation) has come to the forefront. Examination is now regarded as an integral part of the instructional process based on instructional objectives and drawing its content as well as the mode from the teaching-learning functions performed in the educational institution. We now emphasize the need of adopting internal assessment and the use of a variety of instruments of measurement such as the essay test, objective tests, check-lists, guided reading assignments, term papers and small-sized dissertations. We also now emphasize the fact that the results of examinations should be invariably fed into the improvement of curriculum, students' habits and methods of learning and college lecturers' methods of teaching. Thus, examination, curricular improvement and instruction should be integrally related.

In the light of these changes taking place in universities, we should also give serious thoughts to changing the set-up in individual universities for conducting the external university examinations.

We should repattern our Examination Sections on the lines I suggested for setting up a Central Examination Department in the U. G. C. A university should also have a Department of Examination headed by a person of the category of a Senior Professor who has some research background, who has an expertise in the techniques, tools and procedures of assessment and reporting educational outcomes and who has an aptitude and a flair for organising and leading an in-service training programme for the university teachers in the newer techniques of assessment. This person may be designated as the Director of Examination or as it was done in the Chicago University, the Chief Examiner.

This Department should have some technical staff of the categories of Readers who have competence to provide help and guidance to teachers in different Faculties in preparing an improved programme of examination if they like to do so. They should

also have competence in designing as well as interpreting research on the day-to-day problems of teaching, learning and examination.

The personnel of this Department would be suitably oriented to their new tasks and competences by the Central U. G. C. Department of Examination.

I visualise the following advantages accruing from this new arrangement :

(1) A University Department of Examination will be able to perform three vital functions of service/training and research-based feedback for the improvement of teaching and student-learning. (2) We will have an agency in each university which will have a live concern for the improvement in the quality of examinations conducted both by the university as external examinations and by individual colleges as part of their internal assessment programme. (3) It will be possible to organise, from time to time, programmes of in-service training for the staff of different Faculties and colleges. These in-service programmes will provide training to teachers in designing technically satisfactory question papers, preparing effective individual questions of objective type, short-answer type, essay type, and also other tools like guided reading assignments, conducting interviews and viva-voce tests, conducting tests in practical work, scoring objectively the answer-scripts of essay questions, etc. (4) We will have a much congenial climate created in various colleges and departments of teaching for the adoption of improved techniques of teaching and testing as there will be increased inter-action between the University Department of Examination and the staff of individual colleges and departments of teaching. (5) It will also pave a way for increased and more effective collaboration between the U.D.E. and the College of Education or the Faculty of Education of the university. (6) The staff of the UDE will be able to study through research some major and basic problems of instruction, learning and examining. It is these diagnostic studies and action researches which will ultimately help in maintaining and promoting better standards. (7) The increased contact and interaction between the staff of the UDE and the individual colleges or departments will drive into the heads of teachers the advantages of using objective type tests, rating scales, etc. and causing a realization that the task of examination construction is something which is to be spread over the entire academic year (as very often good test-situations strike the teachers

when they are actually teaching) rather than one to be done at the meetings of the paper-setters (8) It will be possible for the UED to make extensive use of the photo-off-set process of printing because it gives them flexibility in the organization of examination material and because it enables them to include a great variety of illustrative materials such as tables, graphs and pictures. (9) The system would ultimately give teachers a feeling of freedom in the framing of courses and also in deciding the nature of treatment an individual unit of the course should receive This will have perceptible impact on methods of teaching and curriculum revision procedures also

These are some of the gains likely to result from the reorganised University Examination Divisions

DECENTRALIZATION OF EXAMINATION WORK

Another necessary measure of reform is decentralising some of the examination work that is now being shouldered by University Examination Divisions to individual departments or colleges in the university

Each department or a college should also have an Examination Unit or Section It should consist of four or five teachers of the college (depending upon the size of the student body and the staff of the department/college) and it be chaired by a senior teacher preferably with mathematical background This Section should be in charge of the arrangement of all internal tests and should maintain all the records of marks or grades and grade points If a part of every Saturday is kept aside for setting internal tests there will not be over-crowding of tests by teachers on any single week day, and students' absence from lectures for tests will not occur They may also arrange some surprise tests to test the extent of understanding and regular reading habits of students

I also suggest another set-up—a small Advisory Committee consisting of two or three teachers well-versed in the techniques of designing a satisfactory question paper and writing individual questions of essay, short-answer and objective variety The Head of the Department or the Principal should be the Convener of this Committee All the question papers set at the internal tests and also the mark sheets of all test results will be submitted to this Committee by teachers concerned The Committee will confer with the individual teacher who set the question paper and scored the students'

answers and will help him firstly to improve the technical aspect of the question paper (such as basing individual questions on objectives, arranging questions according to their estimated difficulty value, clear and unambiguous wording of each question, adequate coverage of the syllabus, using challenging test situations, avoidance of internal or over-all options where possible, etc.) and secondly to make the marking of the answer script as objective as possible. This Committee may also suggest moderation of the results in such a way that the first class, second class, pass class and failures conform more or less a bell-shaped normal curve of distribution of scores.

I strongly feel that the work of internal assessment, maintaining their records and preparing consolidated results of the internal tests be left to individual department/college. These internal test results will be sent by the department/college to the university. The Examination Division of the university will be concerned with only the comprehensive examination in each subject which may be prepared and scored jointly by the internal and external examiners appointed by the university syndicate.

We have had experience of working out this kind of internalising examination in the M. S. University of Baroda over a period of about 15 years. In some of the Faculties (like Home Science, Social Work, Education, and Fine Arts) of the university, all examinations are sessional and completely internal. And the arrangement has worked very well all these years.

THE SEMESTER SYSTEM

The Semester System is ideally suited to bring about curricular as well as examination reform. On the curricular side it helps much better than the traditional pattern, the organization of inter-disciplinary courses permits students to take an unconventional but meaningful combination of courses, facilitates the formulation of sharply focused courses of studies which result in improvement of academic standards, provides a better chance for the success of the approach of objective-centred curriculum and teaching and ensures, in a way, academic autonomy for the teacher and the institution.

On the examination side, the gains of the adoption of the Semester System, too, are remarkable. Firstly, it can reduce or completely do away with the importance and weightage that is

now being given to the final external examinations. Secondly, it will provide students the much needed motivation and stimulus to work. Thirdly, it can promote, to a considerable extent, regular sessional work which helps in bettering scholastic standards. Fourthly, it makes evaluation tests as an integral part of the regular on-going instructional programme, and reduces the present wastage of 17 per cent of the total working days wasted on preliminary preparation by students for taking examinations and the conduct of the examination. Fifthly, it will be possible to do away with external examinations while retaining the external examiners as it is done in many British universities. Sixthly, it facilitates the use of the unconventional tools of evaluation such as guided assignments, term papers, seminar-participation and preparation of critical reviews of text-books. Seventhly, it ensures decentralization of examination work which is now done centrally. Eighthly, it also results in the strengthening and enrichment of individual departments/colleges in a university. Ninthly, it reduces wastage in higher education as it permits the student to take examination in courses at his own speed. Tenthly, it reduces considerably the gap of the long period between days of examination and the day of the declaration of results. And lastly, it also creates a better climate for diagnosing results of sessional tests and using them for the improvement of the curriculum, selection of textbooks and methods of learning by students, etc.

The Baroda University is having the Semester System and sessional work evaluation system in its Faculties of Home Science, Social Work, and Fine Arts from its very inception, i.e. 1949. Two more Faculties, the Faculty of Education and Psychology, and the Faculty of Technology and Engineering have switched on to the Semester System later. All other Faculties provide considerable weightage to sessional work in the final university examinations. The Baroda experience in the Semester System and the internal evaluation of sessional work has been on the whole satisfactory. The system gets into a smooth groove after the initial teething troubles of two or three years.

EXTERNAL EXAMINERS

Ideally speaking, all evaluation should be internal. Those who have the responsibility for teaching should also have freedom to set their own courses of studies and also should have freedom to test their students.

But it is argued that one-hundred per cent internal assessment is not possible in Indian universities of which a large majority are of the affiliating types. The system of internal assessment will not only inflate results, but lower down the standards besides bringing in its trails many ills of favouritism, bribery, intimidation, pressurization, etc.

However, a large number of Indian universities have moved towards the adoption of internal assessment to the extent of 20 to 50 per cent of weightage in the final university examination.

For the improvement of the present situation dominated by external examinations, two ways are possible. We entrust the examination of the sessional work to the individual colleges or departments, and have a comprehensive examination in each course set and scored by external examiners. In the certificates of students, as suggested by the Kothari Education Commission, the results (First Class, Second Class or the Pass Class) be separately shown for internal assessment and the external university examinations. This arrangement is likely to act as an indirect check on individual colleges/departments to inflate their internal results in an unfair manner.

But we can also adopt another approach which is now practised in most of the British universities. We may do away with the external examination, but use external examiners. In this new system, the outside examiners appointed by a university will spend three or four days in the college; they will check up the internal assessment work by revaluing the cases of distinction, first classes, and border-line failures. They can interview also a few selected students for evaluation. They can also give a close look at the textbooks and courses of studies, and they confer with the staff with a view to making suggestions for the improvement of prescribed courses of studies, textbooks, teaching, sessional work, assessment procedures, etc. We are following this approach in two Faculties at Baroda : the Faculty of Education and Psychology, and the Faculty of Social Work. This approach is worth a fair trial in some of our universities.

CONCLUSION

Sir Philip Hartog wrote in 1935 that "no element in the structure of our national education occupies more public attention at the present moment, than the system of examinations". This is true

even now after thirty-five years. The domination of the examinations over the educational system is so much that someone has sarcastically remarked that "in India there is no educational system but there are examinations".

The enlightened as well as the lay opinion in India is extremely agitated over the fact that the damaging examination system has been allowed to be continued without vigorous action for its radical transformation. In this Section I have tried to identify several psychological, cultural, sociological and economic causes that have been operating as great obstacles to the progress of examination reform in Indian universities. I have also suggested an action programme necessitating several steps at the Central and local levels which could result in an effective break-through. This action programme is of course to be a phased one. It should first begin with setting up a Department of Examination Reform to be followed by (or concurrently with it) the redevelopment of the present University Divisions of Examinations into University Departments of Examinations on some such lines as suggested in this Section, beginning at least with those universities where some good work has been done on the examination reform front. The next phased steps would be to extend the measure of the strengthening and enriching of University Examination Sections in other universities in the order in which they have shown evidences of their being ready for the new reforms in examination. The other concomitant reforms such as the introduction of Inter-disciplinary Courses, the Semester System, the Cent Per cent Internal Assessment System, the Partial Internal Assessment System-cum-the External Examination System, the System of Viva-Voce-cum-External Examiners, etc should also be introduced in such a way that they find congenial soil and climate to grow healthily in at least 60 per cent of our universities in the period of next ten years. If the majority of Indian universities can switch on to these reforms, the others would follow with the dynamic leadership exercised by the Central U.G.C. Department of Examination.

UNIVERSITY EXAMINATIONS AND PRIVATE STUDENTS

The question whether students should be allowed to appear privately or not at the university examinations is almost the same as the question whether students should be admitted into universities on the basis of part-time or none at all regular attendance in classes.

This question involves a number of very significant issues. Should students be accepted as private candidates in all subject fields—Humanities, Sciences, Social Sciences, Engineering and Technology, and Medicine? Should there be in the case of private candidates the age-restriction? Should some registration before a stipulated period be made obligatory? Should the fulfilment of minimum requirements for the entrance to the course leading to that examination be not insisted upon? Is it desirable to denote differently the university degrees awarded to private candidates? Is it desirable that private candidates be allowed the same one year period after passing one examination and appearing at the next further examinations? Should all conditions for private candidates be the same for both 'men and women' students? For a good solution of the question of the private candidates for university examinations, satisfactory answers to questions such as above should be sought.

THE CASE OF PRIVATE STUDENTS—A SOCIOLOGICAL ISSUE

The question whether private students should be allowed to appear at university examinations is more or less a sociological question.

Educationally, the entry of such private students cannot be justified. A sound higher education requires that a student comes into the direct and personal contact of his college or university teachers; he can learn a lot more from such a contact than from books; he has a group life and group learning with other students

of his age, he participates fully in all curricular and co-curricular activities of the college, he gets an opportunity to mould and build up his character through these varied and rich learning experiences and he learns through library work, laboratory work, field work and workshop practice. All these experiences are vital and indispensable for the fuller development of his knowledge, skills and competences as well as of his heart and hand. A private candidate gets none of these requisite benefits.

The above is the academic position. But the question has the social side, too. The university education has expanded in the last quarter at a terrific rate unprecedented in the history of higher education in India. The aspirations of different social classes for higher education have increased, since university degrees act as a social lever. With the attainment of Independence, the lower social classes have become so much alive to their fundamental rights and equality of educational opportunity that they have begun to regard the right to higher education as their fundamental right. Attempts made in some quarters to limit numbers in universities and restrict university admissions to really able and well motivated students are met with stiff and serious opposition from lower social classes. The resources of colleges and universities are limited. They cannot take in all those who want to enter their portals. So, in that context, the question of permitting students to appear at university examinations privately has come into a more direct and sharper focus.

THE PRESENT POSITION

In 1967, the UGC had appointed a committee to go into this question. It had collected data regarding 49 universities. These data would yield the following varying situations:

- Universities like Andhra, Bangalore, allow private candidates with no restriction other than territorial jurisdiction.
- Aligarh, Delhi and Jabalpur restrict admission as private candidates to teachers and women only. Banaras and SNDT to only women. Aligarh restricts to only teachers and there, too, for those who are its own graduates. North Bengal, Calcutta and Burdwan to those who have passed their own previous qualifying examination. Gujarat to those whose mother tongue is Gujarati or to those who are staying in Gujarat for more than one year. Lucknow to only teachers. The Vishva Bharti to only its own university employees.

Madurai to only teachers and librarians; Indore, Varanasi, Saugar, Rajasthan, Punjab, Meerut, Vikram, Jiwaji, Ravi Shanker, and Udaipur to only teachers, women and librarians. (Some of these have extended their condition so as to cover members of armed forces and some Inspectors of the State Educational Department.)

— Certain universities prescribe for candidates conditions of residence for a particular number of years, viz. Gujarat has put it at more than one year, Shri Venkateshwara for at least two years; Nagpur six months;

— Other universities like Osmania, Shivaji, Bhagalpur, Bihar, Behrampur, etc. have a wider coverage. They include teachers, women, armed force personnel, officers of education department, demonstrators, librarians, university employees, central and state government employees, etc.

It would, thus, be seen that most of the Indian universities in India permit candidates of the categories of teachers, women, librarians, university employees, members of armed forces, and members of State Education Departments to appear at some of their examinations as private examinees. All agricultural universities and the universities like Annamalai, Baroda, Bombay, Indira Kala Sangeet, Jadavpur, Kalyani, Kurukshetra, Mysore, Roorkee, and Sardar Patel do not permit private candidates. Universities like Delhi, Jammu and Kashmir, Poona, Shivaji and S.N.D.T. provide only library facilities to such students.

“Delhi university conducts fortnightly classes for women candidates. The Poona University allows private candidates to attend lectures at the post-graduate level on payment of Rs. 50 per paper per year. The S.N.D.T. University conducts guidance lectures for private candidates appearing at M.A. examinations. In the Vishva Bharti which allows only university employees to appear at the examinations privately, students are required to consult the Head of the Department regularly for guidance.”

Such is the present position of non-collegiate students appearing at examinations in Indian universities.

SHOULD STUDENTS BE ACCEPTED AS PRIVATE CANDIDATES ?

The answer to this question should be decided on an educational rather than a sociological basis. Those who seek admissions

to university examinations as private candidates are interested in the award of degrees and not of higher education as they glibly and outwardly profess to do. It is such poorly motivated and ill-prepared students who bring down university standards by making the passing of examinations an informal and cheap affair. The rate of failure of private students is higher than that of regular students. In 1967, of the 21 universities in which the B.A. Examination results of private candidates were studied, it was found that the percentages of failures ranged from 79.2 per cent in the Udaipur University to 15.8 per cent in the Luknow University, the mean percentage of failure being 49.7 per cent. At the M.A. Examinations, the range of failures in percentage was 76.5 in the Madras University to nil in the Allahabad University, the mean percentage of failure being 31.7. These percentages of failure are high enough.

The question of private or non-collegiate students was considered by the Kothari Commission. The Commission favoured the extension of opportunities for part-time education through programmes like evening colleges and for over-time education through programmes of correspondence courses which should also be extended to courses in science and technology either at the degree or the diploma level.

The Robbins Committee of England has accepted the position of private students appearing at university examinations, but it has established a principle that equal academic awards should be available for equal performance. In the Indian situation, this principle will not be much useful, as the same examinations are taken by private and regular students, and it has not improved the performance of private students. If private students are to be allowed, some minimum conditions for library work, written assignments, term papers, seminars during vacations or Summer Institute or Camp, etc. should be laid down on a required basis. Again, the facilities for appearing at university examinations as private candidates should be only in Humanities and Social Sciences. No private candidates should be allowed in Sciences, Technology and Engineering and Medicine.

PRIVATE TUITIONS AND UNIVERSITY EXAMINATIONS

The growing practice of giving and taking private tuitions constitutes one of the gravest 'ills' of, and most serious threat to, quality and standards of Indian education. This sickness has defied all attempts to cure it. It has been persistent and growing at the school stage. In the past, for many decades, higher education was completely free from this malaise. But in the recent years the illness has manifested itself among teachers and students of colleges, university departments and institutions, and has been growing unabated. This is very disturbing. It has contributed much towards polluting the atmosphere in institutions of higher learning, vitiating teaching and learning and lowering and diluting university standards besides distorting higher values, intellect and character of teachers and students. The evil of private tuitions on the college and university campuses should be combated firmly and persistently.

WHAT IS WRONG WITH PRIVATE TUITIONS

Educational or academic help and guidance is not at all bad. All students including the talented ones need such counselling and guidance. Some students need individual attention, assistance and direction. Thus, private coaching or tuition is not bad in itself. It becomes bad and constitutes an evil when it becomes 'private' and for the monetary considerations. In some of the colleges and university institutions, the private tuitions have become a thriving business or trade for some teachers. Even junior lecturers of a few years' standing are able to build their own bungalows, ride their own cars, dress themselves elegantly and lead a rich and comfortable life with the help of four to five fold additional income from private tuitions. Some of these lecturers run private coaching classes at home in the morning, evening and even at night, i.e. in three shifts. Their attendance and teaching in their own colleges are just

'formal and routine. They are in their real elements in their private classes at home. If these teachers are good teachers, why should not they function as good teachers on their regular job? If they are hard working, why do they not put in extra time to coach and guide students in the college?

The objectives of some of those who take and give private tuitions are precise and crystal clear. It is for students who take tuitions to pass examinations with a higher class i.e. 1st Class or at least Higher Second Class, and for teachers who give tuitions to get substantial financial benefit from this undertaking. So, both the parties are clear in their objectives.

What is pernicious, disgusting and immoral about private tuitions is the fact that in order that their tuition-students get a higher class, some teachers, who are paper-setters, give out hints pertaining to examination questions to students who prepare for examinations on the basis of the guided or hinted selective reading or practical work. The answer-scripts of such students are very liberally assessed by some teacher-examiners. Students give money liberally; some teachers give marks liberally. Both are liberal in giving as well as in receipts. What a blow to the integrity, honesty and character of college or university teachers!

Private tuitions are more popular in certain subjects. These subjects are English, Science and Mathematics. They are of wide prevalence at the Preparatory Stage i.e. in the P.U.C. Classes, especially in those classes from which students are admitted to courses in Engineering and Technology and in Medicine. One whose ambition is to get admitted to the Medical Faculty takes tuitions in Pre-University Science from teachers some of whom are paper-setters and examiners in the Pre-University Science Courses.

This corruption in colleges and universities is no less serious and damaging to the national character than in offices of civic and public administration.

WHAT CAN BE DONE?

There is no doubt that this kind of corruption should not be taken lightly as one of the passing phases or an inevitable evil of the rapid growth of education in a developing country. It is to be rooted out firmly and unceremoniously by university administrators; University Teacher Associations and University Unions. Giving private tuitions in return of monetary gains

be regarded as a public academic crime, and the defaulters should be as harshly and strongly dealt with as perpetrators of other public crimes.

The Vice-Chancellor or the College Management concerned should call such teachers who are reported to have been involved in private tuitioning and reproach them and warn them personally. If they do not improve, they should be discharged from service.

Those who are even suspected of doing private tuitions should not be appointed as paper-setters and examiners in any university examinations. A teacher, if found to be giving private tuitions, should be debarred from university examinership. The real difficulty will still remain with internal examinations for class records which carry 20 per cent to 50 per cent of weightage in the final university examinations. Even for such internal tests and assessments, such teachers should be disqualified. Here, the Vice-Chancellor and the Head of Institutions will have to be firm and hard-hitting in the case of wilful defaulters. Mercy shown or laxity displayed in such cases will be an act detrimental to the integrity and moral tone of university academic life and a direct blow to university standards.

As a possible measure of corrective and as a way of building a wall of defence against mal-practices being indulged in by teachers-examiners in grading or marking highly the answer-papers of those students who had taken their tuitions on the payment basis, some universities use the system of dummy numbers. Under this system each answer script is given a code number, which is a dummy number, and it is with these code numbers that all the answer-books go to examiners. This prevents identification of particular answer-scripts and it is supposed to minimise the possibility of inflated marking of the scripts of the tuition-boys and girls by the examiners.

This device, in the first instance, does not prevent the evil from operation. Teacher-examiners make their own clues to identify certain answer-books. It results into a battle of wits between teachers and the university. It is also ethically bad. It degrades the teacher. It stabs him in the back, in the heart as well as in the head. Such dummy system is no remedy against the evil of private tuition system. It should never be advocated. It is an insult to the teaching community and the profession. It is educationally not good. Remedies other than the dummy system of numbers should be resorted to.

CONCLUSION

The evil of private tuitions in universities and colleges has grown much during the sixties. The expansion of professional education in Applied Sciences, Medicine and Engineering and Technology has created condition favourable to the thriving of this trade. But it is not only unbecoming for a teacher to do private tuitions for monetary gains as it leads not only to a loss in social status and prestige, but it is demoralising and degrading to him as an individual. It gives rise to many inherent and consequent evils. It pollutes the very atmosphere of the campuses of colleges and universities. This evil should be combated more courageously, firmly and readily. Defaulters should be dealt with strongly. If a few cases are promptly and firmly dealt with by the University Vice-Chancellor and the Syndicate, the epidemic will begin to lose its power of devastating the moral tone and academic standards of colleges and universities. This is a task in which the teaching community, University Teachers' Associations, University Students' Unions and the public at large should all co-operate.

AREA 8 :

NEEDS AND PROBLEMS OF UNIVERSITY STUDENTS

While turbulent incidents and their contributory factors have been a feature of higher education for some years past, what is particularly disturbing at present is the noticeable trend towards a progressive deterioration and the fact that these acts are increasingly committed quite unapologetically and on irrelevant and frivolous grounds. This is specially regrettable in view of the considerable expansion of opportunities for youth that independence has initiated and of the critical challenges that the nation is facing in the fields of both defence and economic and cultural development. In such a situation, sociological explanations are not enough. Indeed, unless they indicate a feasible solution of the problem and lead to effective action, mere explanation is likely to be mistaken for justification. Urgent steps are, therefore, needed to curb these trends and to ensure that, whatever else education may or may not aim at doing, it should at least strive to enable young men and women to learn and practise civilised norms of behaviour and commit themselves honestly to social values of significance. It is also necessary to remember that the responsibility for the situation is not unilateral—it is not merely that of students or parents or teachers of State Governments or the political parties—but multilateral. All of them share it, together with many factors in the objective situation and no effective solution is possible unless each agency responsible for the malaise does its own duty. Some of the remedies for students' unrest, therefore, go beyond the education system. But even if we leave them out, there are two major things that the education system itself can and must do :

- remove the educational deficiencies that contribute to it; and,
- set up an adequate consultative and administrative machinery to prevent the occurrence of such incidents.

—Kothari Education Commission

PROBLEMS OF UNIVERSITY STUDENTS

INTRODUCTION

In the last decade, so much has been written about problems of student unrest, its numerous ugly manifestations and the causes thereof. Briefly, there have been many ugly strikes and demonstrations leading to violence, walk-out from classrooms and examination halls, ticketless travel, clashes with the police, burning of buses and cinema-houses, and some time malhandling of teachers and university officers. There are various causes that have brought about these ugly expressions of uncivilised behaviour, and one such cause is the failure of teachers to interest themselves in the students' problems. Some of the remedies for students' unrest, therefore, can go beyond the educational system. However, attempts should be made that the whole of the university life is to be treated as one.

PROBLEM INVENTORY-ADJUSTMENT MEASURE

What are some of the problems faced by our university youth? An attempt was made to answer this question at the Faculty of Education and Psychology, Baroda, because any service to students can aspire to serve them best only after it understands their needs. The students' problems are a measure of the adjustment which the students are making to life. The Baroda study consisted of a check-list of 232 problems. This check list was compiled from the free responses of students to the request to list five problems which bothered them the most. These responses gave a list of about 600 problems. After properly sorting and adding other problems which have been investigated among adolescent groups and are listed in the literature, an inventory of 232 items was framed.

The entire list covered five main areas, viz., Personal, Family, Educational, Social, and Vocational. The items were further classified into eleven different categories, viz., (1) Health and Physical, (2) Sensitivity and Confidence, (3) Economic and Lack of Facilities, (4) Self-schedule and Independence, (5) Mild Neurosis (Nervousness, Anxiety, Phobias, etc.), (6) Self and Self-image, (7) Sex and Marriage, (8) Social, (9) Family, (10) Studies, School and Teachers, and (11) Work, Career and Future.

ACTUAL PROBLEMS

University students wanted to know about better methods of study, i. e. they wanted to improve their study habits; they were not able to do the work which they decided and hence felt bad; they were anxious to make a success of life; they were anxious to become famous; they wanted to know about various courses and financial facilities, they wanted to improve their memory, as well as wanted to know what career would fit best to them; they wanted to impress others; they wanted to pass their leisure time more effectively; they were anxious to make their marriage a success; and they wanted to get rid of their feeling of inferiority complex.

CONCLUSION

Establishment of competent student personnel services programme will go a long way to remedy and prevent many undesirable outcomes and help students behave according to certain social norms. It is being increasingly realised by educators that, concurrent with the personalised attention given to the intellectual development of the student, other aspects of the individual must also be developed if each individual is to be given maximum opportunity for personal growth. It is the student personnel worker who is charged with the responsibility of providing a programme to complement the classroom instruction and to bring about adjustment of the student to the possible extent.

STUDENT WELFARE SERVICES AND PROGRAMMES

All colleges and universities have at least some student welfare services. In fact, they pride themselves for being able to provide student amenities and welfare services. But the concept of student welfare, as demonstrated in the actual programme of the colleges and universities in India, is rather narrow and limited. The student welfare is interpreted to mean the provision of hostels, the student union, scholarships physical education and sports the N C C. and some kind of health services. These are too few student amenities. The modern concept of student welfare is wider—it includes, over and above the student amenities referred to above services such as congenial environment in a college or a university, healthy corporate life, the provision of a Dean of Students, Student Adviser each for a group of 15-20 students, counselling and guidance services, student homes and non-resident student centres, health and medical services, student aid funds, consumer co-operative stores, book-banks, and others.

STUDENT WELFARE—AN INTEGRAL PART

In the last decade, considerable change has taken place on the outlook on student welfare and the role of these activities in higher education. The University Grants Commission has begun to regard student services and welfare as an integral part of educational development. An improvement of the conditions in which students live and work is expected to have a salutary influence on the attitude and academic life of students. The Annual Report of the University Grants Commission for the year 1964-65 carries the following pertinent observation

“A university or college is not a barren ante-room to live, it is a part of life and the students' stay there should be

happy and a stimulating experience. A congenial environment and a healthy corporate life are essential for serious intellectual pursuits and proper development of the personality. The conditions in which the students have to live and work significantly affect the general academic atmosphere. The provision of essential amenities is generally conducive to an improvement in student behaviour and should prove a healthy curb on student unrest."

Such is the current thinking and modern outlook on the concept and the need of student services and amenities.

The emphasis and implementation of such a concept has become crucial in the face of rapid expansion of university and college education in the country. The statistics for this expansion in the post-independence period are given elsewhere in this book. Here, it will be enough to note that in 1968, the average number of students per university was 23987.1. This average size of an Indian university is unduly high. The ideal size of university is round about 5000. Only 24 out of 80 universities and institutions deemed to be universities, had each an enrolment below 5000. There were only 34 universities each of which had an enrolment below 10,000. This included the 10 institutions deemed to be universities. The average size of a college in that year was 765.1.

This big size of universities and colleges underlines the necessity of making student welfare an integral part of the academic life of the institutions of higher education. Like the school education, higher education, too, should be student-centred. The conditions under which students live, read, study, and develop in colleges and universities, should receive, at the hands of the authorities, as much care and concern as the laying down of modern and up-to-date curriculum, the adoption of effective methods of teaching, the organization of sound examination and evaluation procedures.

What the college and university authorities should try to achieve is to develop a *sense of belongingness*, a feeling of relevance, a process of personalisation in students. The U.G.C. Committee on *The Student Welfare*, makes the following observation on this aspect :

"Without such a programme, the mere expansion of higher education may lead to unhappy results, for no society can ever assimilate, without danger to its well-being, a large

number of superficially well-informed but basically frustrated and maladjusted young men and women." (Report, p. 2)

Thus, the recent thinking is that the problems of student indiscipline and student rioting and unrest are very closely linked up with the inadequate student personnel services.

SOME STUDENT WELFARE SERVICES

Student Hostels and Study Home : The halls of residence for students should not only be adequate but also be suitable so as to provide a rich and healthy corporate life. A hostel should not be narrowly conceived only as a place of living for students; it is a centre of education as well. For most students, there is no satisfactory substitute for a hostel if they are to participate fully in the educational process. The wholesome effects of hostel life in developing a sense of living together, in moulding interests and attitudes, in providing invaluable training for the larger field of life are well brought out in a recent Quinquennial Report of the British University Grants Committee.

"As compared with lodgings or with many homes, a hall affords an environment where intellectual interests are strong. It offers students exceptionally favourable opportunities for the stimulating inter-play of mind with mind for the formation of friendship and for learning the art of understanding and living with others of outlook and temperament unlike their own. It can be, and it often is, a great humanising force. Moreover, in universities where so many students disperse immediately after the working day is done, the halls as continuous centres of corporate life, do something to stimulate the life in the university as a whole."

One of the major programmes of the University Grants Commission of India, ever since it was established, has been the improvement and expansion of hostel facilities among universities and colleges through the award of grants for that specific purpose. This has been 50 per cent of the expenditure in respect of men's hostels and 75 per cent of expenditure in respect of women's hostels. The Union Ministry of Education gives the universities loans for this purpose, as the U.G.C. has technical difficulties to extend loans to universities.

There has been considerable expansion of hostel facilities in the Indian universities. In 1960-61, out of the total university

enrolment of about 8.70 lakhs, 1.53 lakhs or 17.6 per cent were provided hostel facilities. In 1967, 2.95 lakhs or 17.6 per cent of students were residing in hostels. At present the proportion of resident and non-resident students in hostel is a little less than 1:5. Though the number of students residing in hostels has risen steadily, this has generally not kept pace with the rapid increase in enrolment. That was why, though between 1961 and 1967 there was an increase of 1.42 students in residence in hostels, the percentage of 17.6 remained unchanged. The U.G.C. spent Rs. 2.93 crores during the Second and the Third Plan periods on constructing new hostels. It had sanctioned 119 hostels to various universities during the Second Plan and approved 172 hostels during the Third Plan period.

In universities and colleges, despite the increased facilities for hostels, more than 80 per cent students are either staying in their homes or in rented places. Most of these homes and hired rooms do not provide a congenial place and environment for studies, particularly in big cities which are over-crowded and have congested living. The importance of this aspect of the hostel facilities has already been commented upon earlier in this section of the present paper. Therefore, in 1964-65, the University Commission sponsored a novel kind of scheme for the establishment of Students' Homes in universities. The beginning in respect of Students' Homes was in fact made as early as in 1957 when the U.G.C. had accepted a proposal of the Calcutta University for the construction of two Students' Home, each having "two large rooms, one reading room, five large study rooms, one hall for indoor games, cafeteria, kitchen and pantry and blocks of bathrooms and water closets for a unit of 2000 students." A Student Home normally contains reading room facilities for 100 students at a time, with a stack room for about 5000 books, a cafeteria and a dining hall. The U.G.C. gives to each selected university assistance for a Student Home to the tune of Rs. 1 lakh against an estimated cost of Rs. 1.25 lakhs over and above further grants for books. In 1965-66, proposals for the establishment of Students' Homes in 9 universities were accepted by the U.G.C. and of 27 universities were under consideration.

The U.G.C. has been also aiding universities and colleges for establishing Non-Resident Student Centres. A Non-Resident Centre provides facilities for rest, recreation and private study for day scholars. By 1965, the proposals of 21 or 30 per cent of universities

and 233 or about 7 per cent of total colleges were sanctioned by the Commission.

Thus, the hostel facilities for students constitute a crucial and critical aspect of the student welfare. The physical and social environment of hostels should be such as to be able to exert a purposeful and wholesome influence on the character and attitudes of resident scholars. Hostel buildings should be so constructed as to ensure comfortable and cheerful living, provide for quiet individual work and promote growth of a healthy corporate life. There is a special need for increased hostel accommodation for students of colleges in rural areas and women students. Where college and university authorities have failed to give careful attention to hostel facilities and show concern for their continuous review with a view to their improvement and enrichment, this fact has sown the seeds of student dissatisfaction, irritation, and consequently student strike and strife. A U.G.C. Committee on Residential Arrangement for Students and Teachers has recommended that during the Fourth Plan, hostel accommodation should be provided for 25 per cent of the total students enrolled in colleges and universities. A similar recommendation has also been made by the Kothari Commission. This would mean, according to total university enrolment in 1968, additional hostel accommodation for about 5.55 lakhs students. The Committee's estimate for expenditure per seat in a hostel was Rs. 4000. Even then, the improvement and the expansion of hostel facilities, Student Homes and Study Centres for non-residential students should receive high priority in the planning of higher education.

We would like to conclude this section with the following excerpt from the Report of the U.G.C. Committee on Student Welfare and Allied Matter (1966) on the role of the hostel warden :

"The role of the warden in the hostel is a very important one. A warden can act as a guide and a friend to the student who can always look to him in time of difficulty. His duties and responsibilities are onerous and demanding and call for continuous initiative, personal contacts and leadership. The personality of the warden, the interest he takes in the students and the enthusiasm he shows in guiding them properly are important considerations in the choice of the warden. Big hostels do not provide enough facilities for community life and there is little chance for exchange of

ideas and mutual understanding. We agree with the recommendation made by the U. G. C. Committee on *Residential Accommodation for Students and Teachers* that a hostel should be planned in such a way that a warden may be able to look after a limited number of inmates say 50-60."

UNIVERSITY STUDENT HEALTH SERVICES

One prominent difference between foreign universities and the Indian universities that one notices is in the provision of health and medical services to the staff and students which are provided by them on their campuses either free or at low cost. In Indian universities health services for students and teachers are, by and large, not adequately cared for.

The following excerpt from the Report of the Kothari Commission describes a position which is largely true today.

"Health services are generally neglected today. The replies to the questionnaire sent by the Education Commission to the different universities on the subject have revealed that few of them have conducted any health surveys of their students and not many have organized systematic programmes of health services for them. In a number of universities, there is no medical examination even at the first entry stage and where medical examinations have been conducted, they are often of a perfunctory character without any suitable follow-up work. Society has a special stake in the health and the physical well-being of university students who are (or should be!) the elect of the rising generation and in whom it has to invest large resources and to whom it looks for the advancement of national interests. The organization of student health services at the university stage, therefore, should receive a high priority."

The prevailing situation in the Indian university shows how the Indian university administration has either neglected the vital student welfare service or has been prevented to do much in that respect because of the lack of funds. The silver lining in these dark clouds is provided by the Health Centres that have come to be established in about 36 universities by 1967. American univer-

sities provide varied and rich medical facilities and services to their students and teacher communities; in India 45 per cent of Indian universities provide at least health services of a small size and nature. Effective health services should be regarded as an essential programme of student welfare and should be introduced in all the universities.

THE U.G.C. EFFORTS

The Commission had initiated a scheme ever since its establishment as a Committee in 1953 based on an earlier proposal of the Union Ministry of Education, for the Health Centres in the universities. However, the decision on the establishment of Health Centres as a regular and firm programme of student welfare for universities was taken by the Commission in March 1957.

The objective of such a Health Centre is to treat and cure cases of simple illness, and to conduct periodical medical examination of university students.

The Commission's normal basis of assistance for a Health Centre in a university catering for a population of 5000 is Rs. 50,000, and for larger numbers upto 10,000 students, Rs. 1 lakh.

The Mudaliar Committee : The U.G.C. had appointed a Committee, under the chairmanship of Dr. A. L. Mudaliar to devise a scheme covering both the students as well as the staff (with their families) of universities and colleges. The scheme was to be on the lines of the Central Government Contributing Health Service Scheme.

The Committee recommended that a university health service programme should have 'a comprehensive scope including preliminary medical examination, preventive and curative measures, supervisory and advisory services on environmental hygiene, sanitation, etc.' The Committee also felt that such health services should also include immunisation and regular health check up.

Among the other recommendations of this Committee were the introduction of the part-time doctor system to a population of 3,000 students, the provision for special laboratory tests and hospitalisation, and the organization of drug co-operative stores; the contribution of each student should not be more than Rs. 6 per annum, but in the case of the teaching and the administrative staff, it should be on a graded scale as is the case in the Central Government Health Service Scheme.

The Kothari Commission's Recommendation : The Commission, too, felt very strongly about the need for establishing on every university campus and in a township with a large student population a Health Service Centre. This Centre should provide medical examination, follow-up treatment and emergency care. The Commission has also recommended that adequate provision should be made for the health education of students and for securing their involvement in the organization of health services—both in policy making and in the execution of programmes.

Government's Responsibility : The State in India is wedded to the ideal of welfare of the people. This welfare includes the welfare of students and teachers who are very vital constituents of every community. It is, therefore, essential that both the Centre and the State Governments should strengthen the resources of each state university with a view to enabling it to provide adequate and effective services. The Government must provide additional finances and physical facilities to universities. There is no escape for a welfare state from this.

STUDENT FINANCIAL AID

The welfare services for students are complex and many sided. Providing financial assistance to poor but meritorious students to enable them to continue their studies is a very important item of these services. Though the programme of scholarships has received considerable emphasis in recent years, and though the bulk of the scholarship programme is in the sector of university education, it has proved to be inadequate at the university stage on account of a large-scale expansion at this stage. It has to be much expanded and developed.

The Kothari Commission's Thinking : The Commission has discussed the question of scholarships and student aid in its Chapter 'Towards Equalization of Educational Opportunity'. The thinking of the Commission on this question is on the following lines :

- At the undergraduate stage, scholarships should be provided to at least 15 per cent students by 1976 and to 25 per cent by 1986, at the post-graduate stage, this provision should be to the tune of 25 per cent by 1976 and to 50 per cent by 1986.
- Two kinds of scholarships should be made available to students, one for those who stay in hostels and the second for those who stay at home.

- The National Scholarships, instituted in the Third Plan and awarded on merits, have been found inadequate—they cover less than 1 per cent of the students who appear at the various examinations to which these scholarships are allocated. The size of this merit scholarship should be raised to 5 per cent by 1975-76 and to 10 per cent by 1985-86.
- In order to cut down unnecessary and avoidable delay and save students from hardships and worries, the power to issue entitlement cards for these scholarships should be delegated to universities which hold examinations to which national scholarships are assigned; it should also be made a rule that the entitlement card is given to a student along with his examination result; the payment should be made by the institution which the awardee joins from month to month along with the payment of the salary of its staff (after claiming the disbursement from the Government).
- The Government of India should make payments of scholarships directly to universities.
- The general policy should be to award 50 per cent of the scholarships on the basis of school clusters and the remaining 50 per cent, as at present, on the basis of State as a unit.
- A scheme of liberal university scholarships should be developed in the Fourth Plan and their awards should be made in accordance with rules framed by universities with the approval of the U. G. C.

The Kothari Commission has suggested improvement and expansion of scholarships at the university stage on the above lines.

The question of students' aid and scholarship is so vital a welfare service that it should be placed on an effective basis in each university and college. Ordinarily, a provision of scholarship will be more in university departments than in colleges. But good colleges should have as liberal and as efficient administration of scholarship as in universities.

Studies should be continuously made of the cost of student living and education so that scholarships can be made appropriate to the rising index of the cost of living and the direct and indirect costs, at least in hostels, can be kept to the essential minimum. Measures such as self-service in hostels may be tried out which will considerably cut down cost and wastage.

The principle of decentralization should be followed in the distribution of national scholarships to student awardees. A university, instead of a State, be made a unit of administration so far as the administration of the Central Government scholarships is concerned.

Scholarships should be geared both to merits as well as to socio-economic conditions of students. In a study made in 1965, it was found that out of the total number of cases studied, students whose parents' monthly income was Rs. 300 or less were 20.7 per cent in Institutes of Technology, 58.3 per cent in Regional Engineering Colleges, 67.8 per cent in Medical Colleges, 85.5 per cent in Agricultural Colleges, 81.2 per cent in Polytechnics, 98.3 per cent in I. I. Ts and 65.5 per cent in other Technical Institutions. The overall percentage in this income group was 75.7. This shows how important it is to provide scholarships in universities and colleges on the basis of the socio-economic conditions of students.

It will be necessary to provide funds to universities to award scholarships to enable some of their talented students to go abroad for further and more specialised studies. The State will ultimately be a gainer in this. Funds should also be made available to universities and colleges to provide loans to students for further studies. These loans should supplement scholarships in the case of poor but meritorious students. Women students should be given preferential considerations in the awards of scholarships and other forms of student aid. This is necessary discrimination.

STUDENT UNIONS

All colleges and universities have Student Unions. For a long time, student unions were the centres of student activities of cultural and co-curricular nature in which a limited number of extrovert men and women students participated. While the serious and the highly motivated, the scholarly type of students spend their time in the Halls of Library or the Reading Rooms burying their heads in books or journals, the less serious and the less motivated, the light-hearted leisurely type of students spend their time, sometimes even of the regular lecture periods, on the cricket field, or on the tennis or the badminton court or in the recreation room. Students manage their own affairs of the cultural and co-curricular activities. The college or university authorities hardly figure into the picture unless some disturbance or serious event shakes the peace of the campus and the authorities had to intervene.

Those days of peace and serenity seem to be over. University campuses have beginnings of strikes and strife for students. Some universities have serious student unrest involving violence, stone-throwing and burning by students and tear-gasing and firing by the police. In this violent student unrest, University Student Unions are largely involved. They have become the hot centres of angry meetings, loud protests, the passing of strong resolutions sometimes involving ultimatums to university authorities. There is often a clash between students and teachers, students and administrators and students and police. The face of University Students' Unions is fast changing. Their objectives and functions are changing. Their approach and working are changing. Their membership, the election to their executive committees, the role of the Vice-Chancellor, the Syndicate, the appointed teacher president and the other non-student members are becoming crucial.

Membership : The Kothari Commission has suggested that the membership of University Student Unions should be automatic, that is to say, every enrolled student should be presumed to be its member. There is a large agreement on this.

The Student Union should have an elected executive. In many universities, the executive committee including the vice-president and general secretary are elected by the entire body of students. Democratically this is a desirable practice. But in actual experience, direct election proves to be too much waste of academic time, scenes of so much noise by students in the form of election processions, meetings, speeches, etc., resulting sometimes in violent clashes between rival parties involving loss of life. The thinking of the Kothari Commission and some administrators is that the election of office-bearers by the large body of students, be substituted by election through various activity committees. It is presumed that in each University Student Union will offer a wide variety of co-curricular, cultural and sport activities. Every student is expected to choose at least one such activity and pay the required subscription. These students' societies be given powers to select their representatives to the Union Executives.

There has recently arisen a danger to University Student Unions to function as trade unions in such a way that student's interests and rights are well protected. There is nothing wrong in student unions to protect the rights and strive for the well-being of the student community. In fact, if a Student Union does not do

these, it is wrong. However, a university or a college union is not a trade union but an academic fellowship of students, teachers and administrators. This is a fellowship among equals. The fellowship is directed towards constructive decisions and programmes with the ultimate welfare and good of the university or college in the focus. Decisions and agreements are to be thrashed out across the table, through quiet exchange of ideas and viewpoints. Vital decisions on conflicting issues should be arrived at through joint committees of teachers and students. The situation described below by the Kothari Commission should better be avoided.

"There is a general and, perhaps on the whole justified, complaint on the part of students that the college or university authorities sometimes take no notice of their difficulties and deprivations till they are backed by some form of so-called 'direct action' which has really no place in an educational institution. When, however, they are confronted by a strife or demonstration or some kind of violence, they sometimes yield abjectly and students get the unfortunate impression that it pays to break the rules of discipline and good conduct. There is no justification for such administration. The members of the staff, the principals and vice-chancellors should all learn to be sympathetic, yet decisive and firm when necessary, in the dealings with students. What binds together students and teachers in a deep and creative partnership is the sharing of common interests, mutual regard and sense of values and working together for their main purpose which is the pursuit of knowledge and discovery. Anyone who is not committed to this philosophy or prepared to honour it has really no place in an institution of higher education."

The Student Union and the number of extra curricular activity programme it organises should form the part of the official programme of colleges or universities. The relationship among the administrators, teachers and students should usually follow the pattern that one comes across in American universities. Here, the initiative for proposing an extra-curricular activity is expected to come from students themselves.

"They present the administration with an outline of the activities they wish to have included in the official college programme and request the Faculty member who shares

their interest to become their adviser. This relationship establishes a contractual agreement between the students responsible for the organization and the institution. The organization is provided with such rights and privileges as free meeting room facilities, protection against unnecessary overlap from the programmes of other organizations and easy communication with the student body through university publications, to cite a few, which are directly the benefits of being included in the official extra-curricular programme. The organization, in turn, has certain responsibilities and obligations. It must conduct its affairs in keeping with its recognised purpose, conform with institutional policy on financial and other matters, and operate in a responsible manner, consistent with the expectations of the institution."

This spirit and this mode of functioning should be translated in the Indian university and colleges also. In order that students function in a responsible way, they should be given ample opportunities to behave in that way. Their individuality should be respected. Their needs, problems and grievances should be sympathetically and with all seriousness and sanctity be inquired into. They should not be lightly brushed aside. Much of the student trouble arises from a feeling of injustice, ill-treatment, frustration and neglect felt acutely by the student body. After all a university is of students and teachers. The community—the society too—is vitally concerned with it. Still, the focus is on students. Their happiness, their growth and development, their self-realization should be the foremost considerations.

CONCLUSION

These are some of the programmes of student welfare. In the United States, they are called student personnel services. Inadequate services of this kind and mistakes made in their administration are largely responsible for the two of the weighty problems facing Indian universities and colleges, viz., student indiscipline and wastage. In universities abroad, especially in the American universities, the organization and administration of student personnel services have reached a high degree of effectiveness. In India, these services are yet to be developed to a satisfactory extent and placed under the direction of those who have expertise in this field. While it is not true to say, as it is sometimes

alleged that "university authorities in India are indifferent to the welfare of students and the teaching staff do not associate with the students outside the classrooms", the fact still remains that students are not psychologically treated; their fundamental psychological needs of recognition, affection, adventure and security are not properly catered to.

There seems to exist little concern in universities to make provision for advisement and guidance to students towards management of their own welfare activities and participation in orderly self-government. The Dean of Students is still regarded as a decorative frill. Projects for setting up University Student Counselling Centres are finding little or indifferent support. Little seriousness prevails for providing adequate and positive outlet for their youthful energies. They are rubbed often on wrong shoulders in the democratic decision-making process.

This does not mean that everything is good on the students' side and bad on the side of university authorities. Students also play in the hands of local politicians, of political parties as well as from among teachers and they have not always behaved with decorum and discipline. But the cure for this is in giving them better and more opportunities to behave with a sense of responsibility, and providing them an effective programme of guidance and counselling, and a richer and fuller programmes of student welfare and amenities. This will require, perhaps, the Gandhian approach, fervour and faith and the Gandhian sympathy for the ailing humanity.

In the United States, the student is judged responsible, mature and well-intentioned until proved otherwise and is offered every assistance. We should also try to do the same.

COUNSELLING AND GUIDANCE SERVICES FOR STUDENTS

INTRODUCTION

That there should be a provision of counselling and guidance services in each college or a university is no longer a disputed principle. The Kothari Commission has regarded a guidance and counselling programme as "an integral part of the educational facilities to be provided in institutions of higher education". In an investigation covering the alumni of one of the leading Indian universities, a question was put to the respondent students as to whether they thought guidance from a specialist regarding the choice of course or education or career during their student life would have helped them, "Nearly 20 to 25 per cent of the graduates expressed the opinion that guidance would have helped them substantially. Another 10 per cent thought it would have been of some use. The need was particularly felt by the holders of B.A. (Pass), B.Sc. (Pass) and B.Com. Degrees". The University Grants Commission has also regarded counselling and guidance as of great value and significance in relation to the problems of student behaviour that arise in a society in rapid transition and from maladjustment and consequent wastage at university examination. (Annual Report, 1962-63, p. 32)

Of late, there have been many unfortunate incidents of tension between the student body and a number of universities in the country. Such incidents are to be viewed not as a disease but as symptoms of a developing unhealthy attitude and climate in the student population. Counselling and guidance services can be harnessed to correct these symptoms and direct the youthful energies of students in more constructive and fruitful channels of work and service to the society.

The question before Indian universities and colleges is not whether to set up a university student counselling centre or not, but to set up such a centre and to make its counselling and guidance services popular and effective so that a large number of students is able to avail of these services.

This paper seeks to present broad outlines of a programme of guidance and counselling for university students.

PHASED PROGRAMME

A student counselling and guidance centre for a university is a 'must'. It is at least a 'must' for every residential and teaching university and for the resident students of the place where an affiliating and teaching university is located. All good colleges should also offer these services.

In order that these counselling and guidance services are useful and effective from the students' view-points, and that they become feasible in the light of strained finances of the universities or colleges, the work of the Counselling Centre should be phased out over a period of 5 to 10 years.

The first phase should be simple, less complicated and feasible. It should not involve large financial outlay, otherwise the programme will not develop. The initial phase should concentrate on such student services that satisfy the large section of the student community most. It should be basically student-oriented. This phase should include orientation talks, dissemination of information on courses and broad counselling in certain specific cases of emotional disturbances and maladjustments. In the initial phase, a survey of the guidance needs of new entrants can be made. The organization of Freshmen's Week institution-wise should be with a view to acquainting them with the Library, the Reading Room, the Student Union, the Health Services, Scholarships and Loans available, etc. in the university.

In the second phase, group guidance programme for all groups of students in hostels can be worked out on their felt needs and problems. Guidance literature on how to use libraries, how to take and make notes, how to build up good and strong study habits, effective techniques and procedures of learning, etc. can be prepared for students. Some guidance programmes can be offered at this stage to students who fail or underachieve in tests and examinations.

The third phase will cover more 'systematic extensive and intensive counselling and guidance work. There will be concurrent action research programme undertaken by the Centre so that it can improve and expand its services by securing a meaningful feedback from the findings of these researches. The testing work useful for educational and vocational guidance on a wider scale can be undertaken as this stage.

The fourth and the last phase would cover a programme of standardization of scholastic achievement and aptitude tests, conducting surveys and gallop polls (when felt necessary) regarding university students' perceptions about various welfare programmes and activities of the institution and about their needs and problems and the undertaking of studies and researches on student riots and other acts of indiscipline if and when they arise.

The real need of the day is to popularise the guidance and counselling service being offered by a university or a college. In order that it is possible to cover a large section of the student community in its student service programme, the focus in the first phase should be the new entrants. The new students are mostly in the Preparatory University Class. They come from schools which have climate, mode of behaviour, relationship between teachers and students and the method of teaching on an altogether different basis. They do not have and even if they have it is often inadequate and distorted-concept of the college and hostel life. So, in the first phase, the new entrants in the Preparatory University Class should be brought under the direct focus of the counselling and guidance programme. Depending upon the size of the student population, the number of student-advisers should be appointed. All the Pre-University population, and in colleges, all the new entrants, should be covered by these Student Advisers in their service programmes.

We may assign functions such as under to each of the Student Advisers.

STUDENT ADVISER

- To give the students an understanding of the concept of college life;
- To guide them in the selection of optional subjects in light of their aptitude, interest and previous scholastic records, and to discuss with them the requirements of different courses of studies and their implications for career;

- To orient them into the programmes and functioning of the different Faculties and Institutes of the university so that the students know their university well;
- To give the students intensive orientation about facilities, student welfare services, Students' Aid Funds, Special Loans for students, Poor Boys' Library, etc. which are available on the university campus;
- To meet them in small groups to explain and discuss with them the courses of studies, the examination system, the time table, the requirements of attendance, etc., laid down by the university, introduce to them different subjects teachers, and explain all such questions that would help students to understand the building, the programme, the discipline, the moral tone of the institution and adjust themselves to the new atmosphere of the college;
- To guide them on the use of the library, the note-taking and the note-making, the student assignments, writing examination papers and help them to inculcate effective study habits (relevant literature to be published);
- To arrange talks and discussions by prominent teachers of the university who are well acquainted with the programme of the University Union and students activities, so that these students are enabled to participate in those activities in a democratic way;
- To contact each and every member of his group of students either on the campus or by visiting his/her home (in case of students who reside locally) and collect as full data as possible as per the proforma developed in the Centre, and acquaint the student with the services offered by the Centre;
- To counsel them on health habits, physical fitness, sports participation, recreation, etc.;
- To seek to clarify all issues and questions that agitate the minds of the students concerning their institution, the university, their welfare services, other services, and their role in making the life on the campus peaceful, fruitful and recreative.

Among the other functions of the guidance and counselling services, the following five are pertinent. They are the ones that experts usually suggest:

- (i) To arrange talks for them with a view to acquainting them with the role of the Vice-Chancellor and the Pro-Vice-Chancellor,

the Syndicate, the Senate, the principal committees of the University, the organization and the functioning of the University Administration Office, etc.

(ii) To publish and disseminate orientation literature for the S.S.C. Class students of the feeder-schools and the new entrants to the university.

(iii) To serve as clearing house agents on information relating to certain national examinations like the Science Talent Search, technical training courses, national and State public scholarships and financial help from charities and trusts and such other amenities available for students.

(iv) To refer to the Counselling Centre and fix up the meetings with the Counsellor and the Assistant Counsellor (the Psychologist) all cases of more complex type involving problems of emotional disturbance, adjustment, etc. which need handling by experts.

(v) The staff-rooms for the Students Advisers for the Preparatory Students should be located in their college building so that the Advisers are more easily and frequently available to the Preparatory Unit students. But the Student Advisers should also work for part-time at the Centre's Office, where they will participate in the work of preparation of guidance literature and other services of the Centre.

RESIDENT STUDENT COUNSELLORS

The next vast bulk of students which need to be covered up under the guidance and counselling services of the university or the college is the students living in hostels. For this, and other categories of students, two types of counselling and guidance are necessary. Cases of more complex nature of counselling—the problems of emotional disturbance, mental conflicts, maladjustments, sex, etc.—should be dealt with by the technical experts in the Counselling Centre. But the cases of normal counselling for students living in hostels should be dealt with by the Resident Student Counsellors.

A Resident Counsellor is a student possessing leadership qualities and possessing a mature mind. He resides in the hostel. Ordinarily, there should be one Resident Counsellor in a college hostel for 15 to 20 students and in a university hostel for 25 to 30 students. He should meet the members of his group from time to time. He should be always available to the resident hostel students for consultation and advisement unless at the time he notifies on his door when he is not available.

The Resident Counsellor meets his group at a regular interval of time. At these meetings his functions ordinarily will be to—

- (i) interpret the hostel rules to the students of his group;
- (ii) convey the hostel as well as the university expectations to them;
- (iii) discuss with them events about which students have concern and help them to understand them in correct perspective;
- (iv) organise the social functions of the various groups of their and other hostels to develop cultural understanding and social integration;
- (v) see that their life in the hostel is really an educational experience; and
- (vi) seek the help of the Centre's staff when he finds students' problems difficult for him to deal with; etc.

OTHER STUDENT SERVICES

If the new entrants and hostel-dwellers are thus covered up, the bulk of the students will be covered under the benefits of the guidance and counselling services. When these preparatory students move up to the First Year Class and then to the next higher classes, they will be well-acquainted with the programme of guidance and counselling services available on the university or the college campus. Once they know about it, and if their needs are imperative, they themselves will go to the counselling centre and seek their services on their own. These students did have general orientation about their and other institutions on the campus when they joined the institution as new entrants, and those of them who live in hostels had also advisement services pertaining to the life in the hostel and the university/college campus. So, they have been already brought under the direct impact of the guidance and counselling services.

The Counselling and Guidance Centre should offer other student services. They are specified below. The list is indicative rather than prescriptive.

- (i) Offering psychological and educational testing services;
- (ii) Providing psychological counselling and educational guidance;
- (iii) Providing in different Faculties and Institutions of the university leadership in planning and administering student

- personnel services (which would include admissions, development of students' records, orientation, initial adjustment to the Faculty and university environment, student participation in extra-curricular activities, living in halls of residence, student housing, student health, discipline, etc.);
- (iv) Developing pre-admission counselling procedures, providing students with information about their own capacities and the requirements of various university courses so that they are helped to make wise decisions (This will be a service mostly in the vacation);
 - (v) Offering pre-vocational guidance and information; through the university Employment, Information and Guidance Bureau if it exists in the University;
 - (vi) Assisting in placement (This can also be done through working closely with the University Employment, Information and Guidance Bureau—a service for the university leavers);
 - (vii) Providing information and guidance to students who desire to go to foreign universities for further studies, forwarding applications of the First Class students to the universities of the U.K. and the U.S.A. and helping such students to get research assistantship;
 - (viii) Organizing help and guidance for foreign students. (The Centre should work in close collaboration with the present Foreign Students' Adviser if there be any);
 - (ix) Helping the needy students in getting temporary part-time jobs like tuitions, statistical work, etc.;
 - (x) Offering services to schools to organize career conferences, guidance services, etc.,
 - (xi) Teaching and the training of Post-Graduate Diploma Courses in Guidance and Counselling and the Optional Major Group (specialization) in Counselling and Guidance in the Master of Education Degree programme if there are such courses in the university; and
 - (xii) Undertaking such research work, the results of which can be fed into improving the service functions of the Centre at all the three levels described earlier.

CONCLUSION

These are some of the ways in which a university or a college can set-up its guidance and counselling services and make them

popular and effective. The technical staff needed for such student service programme is : one Counsellor, one or two Associate Counsellors, two or four Student Advisers, one or two Research Fellows and the usual office staff of a senior clerk, a typist and an attendant.

It is necessary that the technical staff does a small amount of teaching so that they are in direct touch with the staff and students of some institution or institutions and know the classroom problems of students at a close range. The Counselling and Guidance Centre should conduct Post-Graduate Diploma Courses in Counselling and Guidance and arrange Career Talks, Exhibition, etc. They should work in close touch with the local Bureau of Employment and help in the placement of graduate students in the right type of jobs.

A Counselling and Guidance Centre is a MUST for every university and the college.

DEAN OF STUDENTS

The term 'Dean' is used in Indian universities to denote a head of a Faculty, both as an institution and a discipline. The new development in universities pertains to the appointment of the Dean of Students. He is in fact the Dean of Student Welfare and other amenities. Recently, the term 'student services' or 'student personnel services' is used in the place of student welfare services and amenities. The Dean of Students is a planner, promotor, director as well as the co-ordinator of all the student services on the university campus. Only a few of the Indian universities have a Dean of Students. The Banaras University, the S.N.D.T. Women's University and Osmania University have each a Dean of Student Welfare. Some universities call this person the University Counsellor; some call him the Proctor. Some colleges like the Wilson College, Bombay, and Bhulawata Government College in Rajasthan, too, have Deans of Students.

WHY IS A DEAN OF STUDENTS NECESSARY ?

Every university or institution should have a Dean of Students. The main reason is that student personnel services and the welfare programme have become crucial in recent days. The inadequate and the badly administered student services are one of the main causes of the recent student strikes and strife. The student is not adequately cared for, his welfare is not properly looked into, he does not receive proper attention and advice from his teachers and his energies are not channelised in a constructive way. Such facts are responsible for students going amuck and becoming a law and order problem for the university and the society.

There is a need for a full-time person to look into the needs and problems of students and to plan, promote, implement and

co-ordinate all student services and activities on the campus. Unless there is such a person appointed and a set-up to this effect is created, decisions relating to student welfare, amenities and other affairs will continue to be delayed or their cases will not be well represented. Very often delayed decisions, lack of interest and indifferent attitudes of university authorities to student-questions lead to student provocation and riots.

If there is a Dean of Students, with an adequate team of assistants, the action will be quicker, the decisions will be more realistic and positive, and student troubles will be nipped in the bud.

Both the Radhakrishnan University Commission (Vide-Report, pp. 386-88) and the Kothari Commission (Vide-Report, p. 295) have recommended the appointment of a full-time Dean of Student Welfare to look after the implementation of the complex and many-sided programmes of student welfare and other amenities and services, with tact and vision. Expenditure on such a person and such a set-up should not be grudged by a university, because it would be money spent well on giving a better deal to students. Again, besides imparting knowledge, the purpose of higher education is to teach students how to think. This implies a two-way traffic and multiplicity of means. It calls for the orientation of educational effort in the direction of developing a student into a responsible functioning adult. This means vast extension of student activities to be correlated effectively, and students to be kept engaged most interestingly. This further accentuates the need for a full-time Dean assisted by a full-fledged staff.

WHO CAN BE THE DEAN ?

The current thinking and modern outlook on student problems and needs is that an institution should have a net-work of student services. This would create problems of administration. If a university has a Counselling and Guidance Centre, the problems of promotion, planning and programming the student personnel services will be largely taken care of by the Centre. In that case, the University Counsellor can be elevated to the position of the Dean of Students so that he has both a status and a focus in the functioning of the university. If the University Counsellor does not possess that stature to provide an over-all leadership to all the student activities going on in the university campus, a senior professor with leadership qualities and a flair for working with and for students, can be designated as the Dean of Students. The

University Counsellor and the University Student Union should be brought under his purview of functioning. He can function in their relation as a co-ordinator, besides sharing in all the functions of planning, programming and evaluation of student services. He should be an *ex-officio* member of the university Senate. He should also have a place in all the committees and boards of the university which have concern for student welfare and services.

In the case of individual constituent or affiliated colleges, it is also possible to have a Dean of Students. But it will not be appropriate to designate him as a Dean. It might conflict with the powers and prerogatives of the institutional Dean or the Principal. This person may be differently designated as a Chief Student Adviser. He should be in charge of all student welfare services in the institution. He may be relieved of a part of his regular teaching and supervision work. He should be given a clerk, a typist and assistants from the college staff, on part-time basis depending upon the size of the institution and the nature of student activities.

As stated earlier, a Dean of Students will be required to initiate new services, and this requires imagination and creativity on the part of the initiator. Further, there will be limitations of finances. Hence he needs to be resourceful and able to explore the resources of the community, the students and the staff. He should have confidence which should constantly increase through experience. He will also need to have a great deal of patience for seeing the results of the newly started programmes, because human nature is basically resistant to new things.

A Dean of Students will be required to administrate various student services and activities. He should, therefore, be a person of administrative aptitude and skills. Here, he will be concerned with establishing friendly relations with various people and should, therefore, have the right type of warm personality to deal with people, so that they feel free to communicate with him. Further, while carrying out a programme of activities *he has to work outside the prescribed regular hours*, and hence apart from possessing good health, he should have that kind of family set-up which would permit him to work at odd hours and often longer hours.

A great deal of the Dean's work will depend upon written communications, therefore, a command over language and effective style of writing will play an important role in his success. He should

also be a silent worker with the least craving for lime-light and popularity and be a real friend, philosopher and guide of students

DEAN OF STUDENTS AS A PROFESSIONAL PERSON

As Indian universities do not have a tradition whatsoever in respect of the Dean of Students, it is likely that the appointment of such a person is done in a cursory way—any available person with extrovert habits, a flair for working with students and of seniority of service is installed in the position of a Dean of Students. If this is done, it is unfortunate. It would eventually affect the quality of student services offered by the institution. A Dean of Students cannot be just any body. He has got to be a professional man, professionally trained for discharging this new and challenging job.

A Dean of Students may have either good training in education or psychology with specific orientation in principles, techniques and administrations of guidance and counselling, and a good understanding of human relations, group dynamics, mental hygiene and personality growth. He must be good at organising group meetings and activities, seminars and workshops, conferences and exhibitions. He must have skill in dealing with adolescents and adults.

The Deanship of Students should be a full-time job. But it is better if the Dean does some teaching work, it may be a course in partnership with some teacher. Even the Kothari Commission has opined that way. "He should participate in academic work and be regarded as a member of the academic community."

The Dean of Students should, of course, be regarded as a professional person, with professional preparation and training. It is possible that for some years to come, a Dean of Students will not come from a group that answers all professional requirements of knowledge, training and experience. But he should have more than average concern for and interest in the individual student. He will have acquired "that trait so rare in us who are teachers the willingness to listen while the student talks, the ability to reply with a minimum of sermonising." At least he should have this kind of professional understanding and outlook. He must also be sincere and warm in his contacts with both students and teachers. Professional training will do him a world of good but he requires also a natural talent. As the Radhakrishnan Commis-

sion says, "Persons who understand students, who enjoy working with them but who possess firmness and qualities of leadership together with administrative ability are the types who succeed best. Persons who endeavour to drive or who lack powers of decision will fail" (Report p 387)

FUNCTIONS OF THE DEAN OF STUDENTS

In 1949, when the Radhakrishnan University Commission met, it made the following recommendations regarding the office of a Dean of Students.

"His office should be in the heart of the campus. He works full time upon the problems of helping the students to plan their works and lives. He is concerned with how or where students live, he assists the needy student in finding work if he requires financial aid, or recommends him for a scholarship or loan if he is worthy, he knows about student habits, he discovers whether a student is failing at any important point such as health, morality or class work and moves to assist him. He sees that a student gets a fair opportunity to enjoy the social and recreational life." In short, according to the Radhakrishnan University Commission, the office of the Dean of Students was to be "a place constantly on the alert to promote student life, academic, social, moral and material, and prepared to give advice on every subject ranging from where to buy pencils upto matrimonial perplexities". (Report p. 386)

Organization and administration of student services such as orientation for the new students, advising and counselling services, health services, housing and food services, co-curricular activities, scholarships and financial aids, vocational guidance, placement, remedial services, discipline and activities for resident students are some of the functions which the Dean of Students is called upon to perform. He will work as the director of student activities and will help students to mix freely with the faculty, and discuss with confidence the problems of concern to them. Activities could be made to supplement the curriculum. In fact, a large number of so-called unmotivated students could be better educated through various student activities systematically organised and conducted on a campus.

In India, most of the universities have yet to organise the departments of student services. It is true that most of the colleges and universities have some kind of student services but

they need to be well organised and effectively correlated to the academic and co-curricular programme. The basic function of a Dean of Students will then be to co-ordinate the existing services and initiate the new ones.

E. G. Williamson explains the term 'co-ordination' in this way: "In the final analysis, co-ordination consists not of fitting state programmes or services into a mosaic, but of assisting individual staff members to work together in a dynamic team relationship." The Dean of Students should perform this kind of onerous duty. He should establish a good channel of communication with all those who are involved in student personnel services, get acquainted with one another's work, problems and needs and provide continuous stimulation and encouragement for good work. He has to exercise the right kind of human relationship.

A Dean of Students has to shoulder considerable responsibility in the administration of student services, which would test his administrative acumen, skills and human relationship. His work lies more in the field than in his office. He should, therefore, have a flair and aptitude for work outside his office right into the field which involves personal and group contacts with students, teachers and administrators. A good sense of humour and a good stamina are the added demands made by his work on him.

Chambers's *Twentieth Century Dictionary* defines Dean as "a resident fellow of a college who has administrative functions." A Dean of Students is traditionally charged with the function of maintaining student discipline, possibly both within and outside the campus. But, then, this function does not make him a policeman or a watchman of students' discipline. If at all he has a function relating to the maintenance of discipline, it is by helping to create such conditions of living, studying and self-government on the university campus that students are helped to realize their inner healthy urges and cravings, satisfy their fundamental psychological needs and get much needed training and experience in democratic functioning and in the decision-making process.

The office of the Dean of Students has to be dynamic and active. It should secure and maintain various student records from different heads of institutions and also from the sectional

heads of Students' Services. The Dean should have the assistance of a senior office executive thoroughly conversant with record-posting and record-keeping.

CONCLUSION

Indian universities and big colleges should each have a Dean of Students. In 1949, the Radhakrishnan University Commission had recommended the creation of such a position and office, centrally located on the campus. Seventeen years later, the Kothari Commission has made a similar strong recommendation for the appointment of a full-time Dean of Student Personnel Services. The creation of this office will constitute a much needed development, a new phenomenon and a welcome break-through in the traditionally bound administration of student affairs.

The current thinking and modern outlook on student services do need a person, assisted by an effective set-up, well-versed in this job, with tact, vision and fervour, with a missionary dedication and commitment to student welfare, with faith in the modern youths, with concern for fathoming the depth of student dissatisfaction, frustration and strife so that bridges of peace and understanding can be built to usher in a new era of pursuit of excellence in studies, sports and athletics, building up responsible and vigilant student leadership and peaceful and constructive student society.

A Dean of Students will have exacting work-duties and responsibilities. He should be bodily, mentally and culturally well-equipped to perform these hard and challenging tasks for which he should be given highest recognition in the hierarchy of university administrative and teaching personnel. He should have as good a status as a Pro-Vice-Chancellor or Dean of a Faculty. He should be a person of a category of a senior Professor. He should, no doubt, be a professional man, but he should never cease to be an academic man. He should continue to have his intellectual participation in the University—should not degenerate just into an administrator of student affairs.

It should be well understood that the appointment of a Dean of Students is no solution to student unrest and rioting. At the best, he will help in diagnosing the underlying causes of student unrest and in developing a programme of student welfare and amenities that might remove some of the causes of student dis-

satisfaction and irritation. His basic work and function will pertain to establishing meaningful contacts and developing meaningful lines of communication between students and teachers and between students and authorities so that family-like climate and relationship is established on the campus.

This Paper is concluded with a quotation from the Editorials of Student Services (May 1969) by Dr. Prem Pasricha with whose views many would agree.

"The candidates for the deanship and other student services positions and the authorities are often equally vague about the functions and scope of the office of the Dean. The lack of clarity around the post is very likely to create doubts and fears in the minds of academic Deans, the teaching faculty and certain cadres of administration. It has already become common for the deans of students to be treated as a threat to their colleagues. One basic and the most important requisite for the success of a Dean is the co-operation and support from his colleagues; the colleagues threatened by his position are hardly the ones to extend co-operation and support his office."

It is, therefore, crucial that the job analysis of the Dean of Students is done and the scope and responsibility of this position are well spelt out. This will help in reducing conflict.

ORIENTATION PROGRAMME FOR UNIVERSITY STUDENTS

INTRODUCTION

If there is one single student service programme which should find a place invariably in every university and in each of its institutions which enroll students, it is that of the orientation of the new entrants. In American universities and colleges, the orientation programme is variously designated. For instance, at some places, it is called "Freshmen Week", "Orientation Week", "New Student Days", etc. The programme lasts from one day to one week.

At the under-graduate stage, most of the new entrants are the Pre-University Class Students. They are new to the college and university life. There is so much and so wide a gap between learning in a school and studying in a college or a university institution that the freshmen are likely to be bewildered, frightened, nervous and maladjusted in their new set-up. They hardly have a concept of the college life and the hostel life. The big building of the college, its spacious awe-inspiring lecture rooms and intricate seminar classes, its ostentatious library and reading halls, Student Union, its University Administration Office—all, in a way tend to frighten them. Many young boys and girls feel so nervous at the first new experiences that for many days in the early months of their joining a college, they lead a miserable life. There is, therefore, the vital need of some student service that can take away from their minds the fright of the new situation, new experiences, new programme. One such very helpful student service is Orientation.

To orient is to provide students with information they need just before they begin a new and unfamiliar experience. These bits of information may be incomplete, but still assist the individual in reducing the confusion arising from a new experience and help him perform competently where a non-oriented person of equal ability might fail to perform as well.

MAIN OBJECTIVE

One general and simple objective of orientation programme under student services is to get the new student acquainted with all aspects of the institution and the life on the campus as far as possible. Shaeffer and Martinson outline the major objective of orientation in the following words : "to communicate to the new student that college is a self-directed, intellectually oriented experience " The orientation programme in a college or a university institution should be also utilised to show that in addition to the procedural and socially pleasant experiences of the college life, there will be high scholastic achievement standards to meet, greater personal qualities to develop, high moral values as well as ethical standards to attain from a full college experience.

Thus, broadly speaking, the purpose of the orientation programme is to help new entrants to be well-acquainted with the institution, its physical facilities, its rules, regulations and traditions, the financial aids and facilities available in it for needy students, its academic and co-curricular programme, the examination system, the internal assessment if there be any, its expectations from students, the opportunities available, etc. It helps the student in his initial adjustment. It also facilitates the fulfilling of the administrative needs of the university and college office.

A TYPICAL PROGRAMME

It will be desirable to assign a group of 15-20 students to each staff member who will be their adviser. It is necessary that each student meets his adviser individually or in a batch at least two or three times a week and gets to know all possible things that need to be known about the college, the academic programme, the examination, attendance, etc. as far as possible. The formation of tutorial groups is the first necessary step towards building up an effective orientation programme.

On the first day, the students meet their advisers in the first period. After the initial nervousness inherent in facing a new situation is worn off through the meeting with the student adviser, the entire body of students should meet in the general assembly class.

The Head of the Institution should welcome the students and address them in an informal, friendly way. He should broadly describe the programme of the Institution for the year. His speech should serve as a broad introduction to the institution and the campus.

Then the different staff members—the heads of departments or persons in charge of different programmes of the Institute should

give necessary details about their programmes. This should be done with a limited objective of acquainting broadly the students with the framework of the programme. At this stage, full details need not be given. Students, by and large, will not remember the details at this stage. It is better if some cyclostyled papers giving a brief account of each item are given to the students which would make a meaning for them after this initial briefing. Similarly, the principal university officials should also address the students. Among these should be included one person from the University Office, the University Librarian, the Medical Officer, the Secretary of Wardens' Committee, the Counsellor, the Director of University Information Bureau, the N C C Officer, the Head of the Physical Education Department and the President of the Students' Union.

On the first day, should be distributed the orientation packets containing in brief general information about the university, e.g. a booklet entitled "*Know Your University*", a copy of the Hand book or Prospectus of the college, along with the orientation time table, list of holidays, etc. and badging on which they put their names and then pin them. This helps in remember the names of students.

Next day each sub-group takes a round along with their adviser and one or two old students of the same college or the faculty or the institution. Here, they are oriented about university administrative office, the union pavilion, library, hobby workshop, health centre, etc. On the third day, we can concentrate upon the institutional building where they learn about office and its procedures, getting appointment with the Dean or Principal, the faculty club and the associations as well as with the numbering of the rooms. The fourth day could be devoted to students studying the optional courses and after a conference with the staff adviser each student should plan out his courses carefully. The fifth and possibly the last day of the programme could be devoted to question-answers and to the concluding session, the last item, of course, being refreshments.

Exact duration as well as the other details of the programme are a matter to be decided by each of the universities and colleges individually taking into consideration various points such as the number of staff and students, the type of instruction it provides and the various facilities it has. However, experience is the best teacher. In some of the universities where an orientation programme is a regular feature (e.g. at the Baroda Faculty of Education and

Psychology and other leading Faculties and colleges), it gets improved almost every year, and senior or past students are profitably involved. Students welcome this because they gain an identification with serious purposes and learn to accept responsibilities which go with leadership in a free and democratic society like ours.

SOME PRACTICAL DIFFICULTIES

As in any of the student services programme, here also we do encounter certain difficulties. First and foremost is the lack of positive attitude amongst the majority of the staff. They think that this is one more fad imported from American universities. They are not yet fully convinced about its utility, and think it to be either superfluous or ornamental. Some others feel that this programme helps only the Dean or the Principal in increasing his prestige and labelling himself as a person with new ideas, or as a forward-looking person. Secondly, some staff members think that if students need some information or help they will themselves find it out. Let them learn, let there be no spoon-feeding. Thirdly, some of the staff, specially seniors, do not like to mix and go with the group for orientation purposes, as they feel uncomfortable. Fourthly, some feel that this is not at all their work. Fifthly, there are difficulties of transport for going through the campus. It is also possible that at some places, there could be a lack of funds, as well as manpower.

May be the staff itself needs to be first oriented and efforts be made to drive home to them the point that orientation programme not only helps students towards their general adjustment which is a necessary condition for achieving maximum academic and social success, but also creates among the new comers a feeling of getting a warm welcome which is the first step in establishing a feeling of belongingness.

WHY APATHY OF OLD STUDENTS?

In Indian universities, we find only few Alumni Associations. After completing his or her studies a student often forgets about the institution and teachers. And whenever there are any programmes or campaigns, the old students respond poorly. Why do we find all these? In the field of education, every phenomenon is a multi-dimensional one, hence there are a number of factors responsible for this present day situation, and one of the contributing factors is the lack of student personnel and guidance services.

We have somehow forgotten the importance of the first impression. When a new student enters the portal of a university what type of welcome he receives, and how the university or college is prepared to receive him become crucial for him later on. The basic need for welcoming the students and showing them that they are an important part of the university, is the main function of the orientation programme.

Also because students encounter changes in types of schools and colleges as they progress along the educational ladder, orientation activities should be provided at these breaking points. Further, a programme of orientation experiences prior to and during the transition period, will help bridge the gap and assist the student towards adjustment.

Orientation programme is the first part of the guidance process, and helps in creating a feeling of belongingness amongst the students and encourages them to take fuller advantage of the other services.

WHAT DO WE DO IN ORIENTATION ?

The new students are assisted in making adjustments through a systematic programme of activities by which they can become acquainted with other students, teachers, facilities, regulations and procedures of the institution. Specially in preparatory classes where students have just come from secondary schools, experiences with new elements encountered under the supervision of sympathetic adults can do wonders in alleviating the fear of students, and in providing an atmosphere in which they will feel secure, adequate and contented. Further, this kind of warm beginning will contribute positively to students' ability to adjust satisfactorily to subsequent experiences.

CONCLUSION

Indian universities are recognising steadily the need for an effective orientation programme for their students. It gives students a feeling of getting warm welcome and makes them learn many things quickly, efficiently and in a friendly manner instead of learning about facilities and procedures through hard, awkward and sometimes discouraging and time-consuming ways. This creates a feeling of belongingness which goes a long way in their associations with the university after leaving the studies.

A PROBE INTO STUDENT TURBULENCE IN UNIVERSITY CAMPUSES

A new kind of student movement, unparalleled and unprecedented in the history of not only Indian education but also of the world education, has been gathering momentum and strength. The movement seemed to have erupted suddenly from the Berkeley Free Speech Movement Episode in 1964. It then spread to Berlin, Nanterre, Sorbourne, Brussels, Rome, Florence, Milan, London, Tokyo, Indonesia, Mexico and to India. The movement has become a global reality and an established fact in the small span of only six years. The various epithets used to describe this movement—the upsurge, hyper-activism, power quest, unrest, resurgence, awakening, anarchy, promiscuity, subversion, mad vitality, etc. tend to focus on the main characteristics and features of the movement. This movement is at the root of the large-scale student-riots and strife that burst out in the campuses of the universities all over the world. The demand of the student community for a seat on the governing bodies of their universities and a right to participate in their decision-making processes is also one of the major off-shoots of this movement.

POSSIBLE CAUSES

Why has this movement so suddenly erupted? What are the generating factors of this movement? Are the disgruntled politicians at the root of this movement? Are the rigidity, unimaginativeness and poor human relationship in the university administrative hierarchy responsible for these disturbances? These and such other questions are frequently raised in attempts that are being made to understand the causes of the phenomenon.

Those who have tried to answer these kinds of questions emphasize the fact that this movement is not just a transitional or

a passing phenomenon, it has rooted itself deep enough to stay long if not for ever. It is not engineered by politicians though they have found it profitable to use the movement to serve their ends and hence they support it ingeniously to keep it going. The bureaucratic, rigid and rough administrative machinery of our universities sparkles off incidents which feed this movement, but student wrath against administration is merely an excuse for the movement to come out openly and it is not at the root of its causation. The causes of this movement seem to be too complex to fall within the ambit of easy description and specification.

It is becoming abundantly clear even to a layman that the universities, at least in our country, are fast losing their character as famous places of excellence, peaceful places of the pursuit of knowledge, of quiet research and experimentation, of self-possession and self-control, of bright eyes looking to heaven for the confirmation of their hopes. This state of affairs adds one shade to the complex of causes.

Students, teachers and administrators, the three main constituents of a university, reveal a kind of down-grading on several counts. They seem to have forgotten to keep their minds cool and temper controlled. The reactions of students are born often out of poor interaction and a lack of dialogue between teachers and teachers, between teachers and administrators, between students and administrators and on the whole, among the three. The great distance that has developed and has been further developing seems to be stiffening the attitudes of each of the constituents, i.e. the administrators, teachers and students. Where there should be a dialogue and concern for mutual understanding and respect, we have outbursts of emotionality, walls of indifference, shouts of meaningless threats and slogans and rhetoric of cold war. It has resulted in what an Indian educator calls a "sharp polarization of forces in the two sides". The poor or inadequate communication among the three main constituents of the universities seems to be another streak in the variegated, complex fabric of student upsurge and their revolutionary demands.

The utterances of some of the foremost of student leaders who sparked off the first wave of student-outbursts in the U.S.A., France, Germany and in other European and Asian countries give us some insight into the thinking and feelings of a section of the student community and another possible cause of the strife. I quote below some of these utterances.

—"At graduation we face the certainty of some kind of death, moral if not physical, and we must hence do all our living, endure all our agony and ecstasy in four short years. We dwell with the horrible feeling of being a pawn caught in someone else's chase game. Is it any wonder that we are disenchanted with the society that could give rise to this situation?"

(A Harvard Under-graduate)

—"We are turned to bitterness by the impotency of our action. We cannot follow because we are not validly led. We cannot lead because we are not heard"

(A Student of The US Campus)

—"University life itself is a series of fundamental questions. And once they (the students) start to analyse their own problems, the logic of their conclusions drives them on ultimately to reject the whole of contemporary society. This is because, as an essential part of the social system, the university necessarily contains all the contradictions, conflicts and paradoxes that characterize the society itself"

(Cohn Bandit)

—"We are not so much protesting that our education is out of touch with the needs of the future, nor complaining about the shortage of jobs, we totally reject the entire system. Our protest only turns into violent action because the structure of the society cannot be smashed by talks or ballot papers. To dream of turning the university into an 'island itself', where every man will be able to work in independence and peace, is, in any case, an empty dream, because the future 'intellectual worker' will not be able to accept the fragmented and alienated life which this dream entails"

(Cohn Bandit)

These utterances show that there is a section of the student community which is dissatisfied with the teaching and learning going on in our universities. But more than that they seem to be disillusioned about the promise of a new social order which the national leaders held out for long since the attainment of Independence. They are frustrated at the present social structure and with the university as a part of that social structure and which firmly believes that the diseased social structure cannot be treated by nature cure—it has to be subjected to surgical operations with a sense of finality and with feelings of no compassion or remorse.

The youths seem to be eager to demolish the present goals, structure, functioning relationships, the value system and such other aspects of the role of universities and desire to build a new pattern by wiping out the debris of the old as would satisfy their urge, needs and thinking

Thus, the causes of the current turbulences in the university campuses are so complex, varied, ill-defined, deep rooted, ideological and emotive that one feels that they are the manifestations of the groping and confused efforts of a small section of intellectuals of the student-community at the re-appraisal of the society which is carried out at the non-cognitive level of spontaneous action and emotive responses. Basically these attempts seem to be "a quest for a new form of participative life in the university campus motivated and sustained by a new set of goals in a new pattern linkage between the university and society. All that one has is the loud dramatic and confused rejection of the established version but the rhetoric of rejection carries within it hints of the new set of promises and values in terms of which the core features of the new vision can be tentatively defined."

A profile of three shades is available of students in the university campuses. There is a small size group who are academically well motivated, keen and serious about the achievement of their goals, very intelligent and efficient, but more concerned with degrees than anything else. There is another small group. It has a number of third graders but it has also some who are quite intelligent, bold, violent and dynamic, possessing leadership qualities. They have abilities to organize and lead demonstrations, marches and gharaos. They know how to show themselves off, exploit in a maximum way the feelings of injustice and injury felt among students. Though in a minority, they know how to create a climate of majority of following. They create a public opinion through press statements, leading mass processions, raising shouts in the street and through several such devices of drawing the attention of the public.

In between these two groups there is a large group of collegians who are middle-paths. They have potentialities, but are, by and large, disinterested or interested in watching the outbursts as they provide them fun. Some of them join the disturbances. But had it not been for the push and the puff they

receive from the group of activities, they would have quietly whiled away their time in the universities.

A POSITIVE APPROACH NEEDED

These are largely the facts and factors that contribute to student tumult in the campuses of the universities. The world is rapidly changing. New urges are in evidence everywhere and in all the classes and sections of the society. The reappraisal of the social and moral values has been also going on in great intensity. Along with these reconstructive influences, baneful influences of various unholy forces are also in operation. Willingness to work for the greater good of many has been getting weaker. There are many and varied, often conflicting demands coming forth in different fields and by sections. The complexity of social, political and economic forces operating on the educational scene makes many educational issues and events confused and clouded. Student-rioting is one such issue. The remedy is not repression. Repression cannot and will not work. The remedy lies in recognising the reality of the change of social and educational winds and providing for a positive and productive approach.

STRIKE AND STRIFE BY COLLEGE STUDENTS

Frequent strikes by students in colleges and universities are the most disturbing and harmful aspects of the current educational scene in most of the universities in the country. This sickness is not confined to campuses of Indian universities only. It is an international malady. Universities of very few countries are free from students' strikes and strife.

THREE MAJOR CAUSES

The causes which lead to strikes can be grouped under three major heads.

Firstly, there are international trends of student unrest at the university stage. The youth all over the world seems to be in rebellion against traditions, authorities, control and regimentation. It is possible that Indian students read about strikes and disturbances in universities outside India. Two years back in the month of May, France was confronted with the most devastating and penetrative student unrest in the history of its national life. It soon sparkled off similar outbreaks of student wrath and agitation in West Germany. These events perhaps led to violent disturbances by the students of the London School of Economics and Politics and of other institutions of higher learning in the U.K. The American Universities, too, were frequently rocked by students' riots.

Another group of causes relates to the conflicting political ideologies in the country and the anxiety of the leaders of different parties and political pressure groups to utilise students to serve their ends. In many parts of the country, strike by students is a ingeniously manoeuvred thing, as one of the strategies of local political nawabs to embarrass their local political rivals that may be in charge of the local governance.

But a large group of causes centres round the institution—the college or the university itself. The failure of the authorities to meet the demands—legitimate or fancied—of students, and an unfortunate feeling among them that authorities only understand the language of violence are, too, responsible for their provocation.

How do we rate these three groups of causes in order of seriousness in bringing about the student strikes and strifes? Institutional problems, i.e. the failure of the authorities to meet the legitimate or fancied demands of students is perhaps the most frequent and explosive of causes of student strife. The frustration, the discontent, the annoyance, the exasperation felt by students on really or imaginary unjust acts of their teachers, principals, management or of university authorities are at the root of most of the student unrest in Indian universities. Next to this is the influence of the political party or parties. The influence of international trends may be a cause but only a remote one. It may be providing some kind of background—stimulation. But our Indian students have not yet developed such deep and furious political, social, economic and cultural beliefs and convictions that international events would so quickly and easily trigger off their violent reactions. Of course, this would happen if somebody uses these events as a tool for exciting and inciting the easily impressionable adolescents and youths.

The most vital issue in regard to students' strikes is the modification of their attitudes. Can something be done to bring about a substantial modification in the attitude of students? If so, which agencies should come forward to do this? σ

GOVERNMENT'S ROLE

The State Government can play a useful role in averting student strikes. Firstly, it should never do anything that would provoke the student community. It should develop a sharp sensitivity to the desires and aspirations of the youths. It should now recognise the new temper of the youth. The young men and women of the colleges and universities cannot be dealt with in a bureaucratic way; wherever colleges and universities are located, the State Government should set up tripartite or four party Committees consisting of the representative of the college or the university authorities, representative of students, representative of the Education Department or the District School Inspectorate and of the Local Panchayat Raj Body. This Committee should be entrusted with the work of advice and

guidance on all student disputes. And this should be done as soon as the dispute comes to the surface and particularly before the strife takes an ugly turn.

THE ROLE OF TEACHERS' ASSOCIATION.

In fact, it should be the responsibility of the College Teachers' Association to go immediately into the question of students' dissatisfaction and demands. The Association should use the good offices of some teachers who command love and respect among the student community. They should be asked to meet students and understand and assess the justification and gravity of students' grievances and be used to bring about an understanding with them. The Association should play its role on purely educational plane. It should work out the balanced and fair solution acceptable to students and then advise the college or the university authorities as may be concerned with the dispute.

THE ROLE OF STUDENTS' ORGANIZATION

Whenever student community is involved in any dispute, it should take the help of some of their teachers, whose objectivity and interest in student welfare are accepted by all, and other local educationists of broad outlook and understanding to examine the dispute. After assessing objectively and comprehensively, the merits and demerits of the dispute, it should work out a practicable solution in collaboration with the Teachers' Association. The politicians should be kept at a distance. Then, their representative should confer with the members of the three-party or four-party Committee of the Government. The decision of this Committee should be respected by the Student body, the college authorities and the Government.

THE ROLE OF ROTARY AND LION'S CLUBS

In some countries Citizens' Organizations and Parents' Organizations play a positive and moderating role in solving amicably the disputes between a student body and college authorities. In India, we do not have many parents' organizations. Citizens' organizations have so much political infiltration that it would be perhaps risky to bring them in the picture. But organizations like Rotary Clubs, Lion's Club, Junior Chamber, Inner Wheel Organizations of women can be very much helpful if the contending parties are prepared to accept their advice.

THE STUDENT COURT

The Amendments adopted by the Senate in the Baroda University Act provide a Student Court, having a statutory status, to thrash out all the problems and difficulties of the student community. This Court has a majority of the student representatives. These representatives would have full opportunity and freedom to place before the Court their feelings and views on all their problems, including even relating to curriculum, methods of teaching and examination. Two student representatives of the Court are also given membership of the University Senate as Associate members. They can, therefore, place their views before the University Senate. Arrangements like this would also help in developing greater understanding of students' needs and problems.

If measures such as the above are adopted by Government, colleges, universities, teachers' associations, students' organizations and citizens' councils, the frequency and intensity of strikes and strifes by the student community will be considerably reduced.

STUDENT PARTICIPATION IN UNIVERSITY DECISION-MAKING PROCESS

The student communities all over the world have become vocal, vehement and violent in their demand for a right for them to participate in all the decision-making processes of their universities. This amounts to, according to their representatives, some seats in the governing bodies of universities such as the Senate (i.e. the Court), the Syndicate (i.e. the Executive Council), the Academic Council, the Faculties and the Boards of Studies. They want that they should have their say even in the appointment of their Vice-Chancellors and other key university officers. They have a very good representation and a good measure of share in the management of University Student Unions, College Student Unions, University Hostels, Extra-Curricular Activities, and some such other student-welfare executives. They seem to be not satisfied with this limited share they have been so far given by universities in the management of their own affairs. They want more and fuller participation and that, too, on all the crucial bodies and in the matters of university governance. This demand is growing and spreading to many universities in India. In the case of some of the universities in India, the demand has triggered off violent and destructive outbursts of student wrath. Vice-Chancellors have been gheraoed, insulted and roughly handled. 'Morchas' have been led to the meetings of the Senates and Syndicates. Threatening statements have been made by students in the press besides the issue of turbulent handouts and bulletins.

Student demands have become a great headache for the university authorities, especially the Vice-Chancellor and the Registrar. They are subjected to great powerful pressures, both from without and within. They have begun to realize that they have now to live in the new reality of student demonstration, strikes and strife.

Public opinion for conceding students their share in the management of university affairs is slowly, but surely, building up. People connected with universities have begun to feel that sooner or later students will have to be admitted as co-partners along with teachers and administrators in the management of university affairs. They seem to be crystal clear about the point that ultimately students shall have to be associated as full-fledged members with the Senates and Syndicates of their universities. But some want that before students are given this crucial status, they be first trained to participate in the decision-making processes in bodies which are intimately concerned about the programme of student-welfare.

To that end, some universities have also started their efforts. For instance, the Andhra University has constituted a Consultative Committee of teachers and students for the university colleges at Waltair. This Committee discusses matters such as policy regarding admissions, library, course contents, examinations, hostels, sports and cultural activities that pertain to the whole student community of the University. The Punjab University has set up a University Student Council under the guidance of the Dean of the Students' Welfare which, as claimed by its Vice-Chancellor at the Delhi Meet of Vice Chancellors (Jan. 14, 1970), is yielding "fruitful results in changing the rationale of students' thinking." In its proposals for the Amendment of its University Act, the M. S. University of Baroda also has provided for the creation of a Students' Court, where the representatives of teachers and students, with the latter being in majority, would discuss all questions, academic, administrative and financial, affecting students, and the decisions of this Court would be placed by two of its elected student-members at the meetings of the Senate of which they will be associate-members without having the voting right. The Trivendrum University of Kerala has been the pioneer among the Indian Universities to make a statutory provision for student representation on the Executive Council of the University. A private Bill was also permitted to be moved in February 1969 in the Indian Parliament to provide representations to students on some important bodies of the four Central Universities. The Kothari Education Commission, too, has recognised the force of the argument that student representatives be given a place on important governing bodies of universities, including their Executive Councils or Syndicates. The Andhra University is also

reported to have decided "to associate, to the extent possible, students with the statutory Boards of the University. Thus, some of the Indian universities are moving, though slowly and cautiously, towards the goal of granting statutory rights to student representatives in the management of university affairs. They are moving slowly, because the question though of 'considerable concern' is "not a simple one".

THE STATEMENT OF BRITISH V.C.s AND NATIONAL STUDENT UNION

On the question of the student participation in university decision-making, process, the committee of Vice-Chancellors and Principals of the U. K. and the National Union of Students held among themselves discussions on a range of points of concern to the university community and consequently issued a joint Statement on October 7, 1968.

The Statement recognises the fact that social situation has been changing rapidly in recent years and young men and women of student age are expected to bear the full responsibilities of adult life much earlier than would have been thought reasonable a generation ago. Against this background the rights of students in the conduct of the affairs of their university should be considered and their present position be correspondingly modified and modernised.

The Statement also recognises two important facts about the student participation in the university decision-making process. Firstly, most of the charters and statutes under which the universities operate are "in part guarantees of intellectual freedom and independence" and "in part careful allocations of responsibility among the various elements of the university." Secondly, the period during which students can play an effective role in university government is limited. The implication is that student demand for participation in the affairs of the university will be limited by these two facts and factors.

The Statement identifies three areas of university functioning in which student participation in the decision-making can be of varying measures. The first area is that of the student-welfare field. The Statement shows agreement to the effect that there should be varying degrees of participation of students in the decision-making process concerning the student welfare activities. It recognises the right of student organizations to have responsibility for the management of extra-curricular activities.

In areas relating to curriculum and courses, teaching methods, major organizational matters and issues concerning planning and development of their universities, the Statement concedes that the 'ultimate decision must be that of the statutorily responsible body' though it regards it "as essential that the students' views should be properly taken into account."

The Statement clearly and categorically regards that student presence would be inappropriate on bodies that are concerned with "appointments, promotions and other matters affecting the personal position of the members of staff, the admissions of individuals and their academic assessment."

Regarding course-content and teaching methods, the Statement recognises the clear right of the individual teacher, in consultation with his colleagues. It clearly expresses itself against the infringement of this right from any quarter, be it from the university governing bodies or from students or from the public pressure. The Statement gives credit to students that they are "fully aware of the need to preserve this most essential of all academic freedoms". However, the Statement holds that without any interference with this academic freedom of individual teachers, it should be possible to provide good opportunities to students "to enter into discussion about the content and structure of courses, about teaching methods in general and about the effectiveness of the particular teaching which they are receiving."

Thus, the British Vice-Chancellors are, by and large, in favour of providing the participation of students in the decision-making of the universities and the National Union of Students seeks effective student presence on all relevant committees of their universities. Both the parties seem to appreciate and recognise the fact that there are certain areas of operation where students' representations in the decision-making should be a *must*, while in some areas though students' views should be taken into full account, the ultimate decision-making should be that of the statutorily responsible body, and there are certain other areas where student presence would be inappropriate. The opinion, no doubt, further recognised the fact that the machinery of student participation could and should be extended and improved.

THE THINKING IN INDIA

The thinking in India on the issue of student participation in the decision-making process of their universities has not yet

taken definite shape and trends. There are some Chancellors and Vice-Chancellors who have categorically opined themselves against student participation in the university decision-making. The views of some of them may be quoted to clarify their stand :

———"It is sometimes suggested that students should be allowed to participate in the administration and academic decisions of colleges and universities. This is, perhaps, an attempt to oversimplify the problem....While it is always desirable to have close contact with the ideas and aspirations of the students through various devices, the provision of elective posts for them in administrative and academic bodies would, in my view, make confusion worse confounded." *Shri Shriman Narayana, the Chancellor of the Gujarat University*)

———"Our students constitute a much more immature section of society and it would be desirable to watch the experience elsewhere and not to rush in for such experiment to associate our students in university administration. It may result in further deterioration in academic standards." (*Vice-Chancellor, University of Bihar*)

———"Student participation in university administration, for the present, needs to be played down." (*Vice-Chancellor, Bombay University*)

The view-point that opposes students' right to participate in the decision-making does not wish to deny the student forums to act as a training ground for full leadership and build up their administrative potentialities. It opposes only granting student-representatives a place on the University Executive Councils, because in the latter so many items of confidential nature are being discussed and decided that student presence would not only constitute embarrassment to administration and teacher members on the body, but also would harm academic interests.

There is another view-point held by those who take the middle line between the entire rejection and the whole acceptance of students' involvement in the decision-making processes of universities. This view-point concedes that students should have participation in decision-making through their representatives in extra-curricular activities. Even in areas of student-welfare they can be fruitfully consulted and their voice be heard before decisions are taken. On questions relating to curricula, admission to courses, examinations, appointment of teachers, and teaching methods

followed by them, students should be given a prior opportunity to express their needs and views, but the ultimate decisions should rest with the appropriate university bodies like the Executive Council, the Senate, the Academic Council, the Faculties and the Boards of Studies.

"Representatives of students can be admitted as full-time members of the concerned authorities and allowed to participate in the discussions and to represent the views of the students. Whenever student participation is not possible, say, on an Examination Board, they should have opportunities to discuss the general principles involved in the related decisions and their views should be considered before final decisions."

The third view which seems to be very radical holds that participation of students in the decision-making of their university should not scare the elders into thinking that students will dominate and won't listen to them. This view has faith in students that they will behave well in their assignments of responsibility. It emphasizes the fact that a university is a body corporate of the teachers, students and administrators. Student participation is a requisite for the effective, smooth and peaceful functioning of the university. Its value and need lie in the need to ensure co-operation and good will among the three constituents of the university community.

The view further maintains that students, as much as teachers and members of the governing bodies of their university, have incontrovertible sial in the educational process. They have an equal right to good education, equality of educational opportunity and equity and justice in treatment. Students have as much right as the teachers to slack their thirst— "the thirst that from soul doth rise, doth ask a drink divine". It is, therefore unthinkable, according to this view, to deprive students of their share in the university academic life and the administrative and financial forces which largely shape this academic life. It further maintains that in this age of democracy, the university has to be "for", "of" and "by" students. This can be made a reality by conceding students the right to participate in university affairs. The fear that students lack maturity, emotional stability and perspective are more of assumptions than facts. On the contrary, if they are trusted and involved in the major decision-making process of universities, with a right approach, and with tact and good human relationship,

their participation would result in better mutual respect, more creative and productive dialogue and discourse and better co-operation. *If students are involved in the important process of decision-making, they would develop more seriousness and sobriety, and develop better attitudes towards their studies, and would assume great lead in controlling their campus problems. This would be in the ultimate good of the society and the nation.*

CONCLUSION

Such are the views and trends in regard to the difficult, complex and explosive question of student representation on the governing bodies of universities. The first view denying any right to students to have them heard on university decisions is not tenable and hence cannot be accepted. The second view is more rational, and likely to be more realistic in the present climate in our universities. But universities will have ultimately to move to the third view, as the democratic urge of students cannot be blocked. Students' right of participation on university bodies should be recognised firmly. It may take any shape or form. But right they should have. A university will develop only if it provides to students and teachers means of frank, rational and critical discussions. And student participation should be conceded in a positive and democratic way, and not as a measure of corrective to student riots. The concept and practices of traditional authority should undergo a change. That is the need of the day!

The following excerpt from the Report of the Gajendragadkar Commission on the subject would provide a befitting conclusion to this paper.

"In dealing with the question the level and degree of maturity of the students will have to be taken into account. In some areas the students can be left to manage their own affairs and these areas would be those pertaining to extra-curricular activities which have become an essential part of modern education, for instance, such areas are covered by the management of hostels, running of youth welfare-boards, and other cultural and physical activities. In some areas, their views may be ascertained and taken into account by decision-making authority, but in identifying these areas and determining the manner of participation of students, we must never forget that the main object of association of students with the university administration is to emphasize

the academic significance of such participation which would make education richer and more meaningful in every way; it is not identified to enable the students to introduce political overtones in university matters. In addition, all departments should set up Councils of Students' Affairs or Students' Advisory Councils consisting of students and teachers."

PROBLEMS OF UNIVERSITY PREPARATORY STUDENTS

The furious activities and the aggressive rush and push for admission to the Preparatory Classes in Arts, Science and Commerce in the universities of Gujarat and elsewhere are ordinarily over by mid-June and the classes start functioning in the beginning of July.

ORIENTATION

Some of the colleges and university units, where the enrolment in these preparatory classes is over a thousand, organise a series of orientation meetings and lectures for the new entrants. The main focus in this orientation programme is to introduce the young boys and girls who are new to the college climate and to its programme, to the various facets of their life on the campus of the college—the syllabus, the arrangement for teaching, the scheme of internal assessment and tests, the library and the best way to utilise it, the student welfare facilities in the college and on the campus, the N. C. C. and so on.

These meetings and lectures are good. But when they are done on a mass scale, their objectives are realized by only a small number of students. Freshmen in colleges do not yet have that background to be able to cull out the most essentials from the mass type lectures, and further, it is likely that they even miss the vital points. The speakers at such orientation lectures are not always interesting and effective in their presentation and elucidation.

What is really needed is to prepare some orientation literature written in a style and language that the freshers can understand. The narrative and description should be crisp and catching. It should be well illustrated with fine and clear pictures. It should also contain answers to all such questions which the freshmen

usually ask. This literature should be placed in the hands of each boy and girl admitted to the Preparatory Classes.

THE STUDENT ADVISERS

The orientation lectures and literature are good. They do serve a purpose to some extent. But still their effectiveness is likely to be limited. In the universities of the U. S. A. and those of a number of European countries, there prevails a practice of Student Counsellors. Each student is assigned to a Student Counsellor or an Adviser whom he or she is expected to meet by previous appointment. This personal contact of the student with his adviser is valuable. The student new to the campus and to the academic and other co-curricular and cultural programme of the college or the university gets from the adviser a lot of information and explanation which helps him to establish a relationship between the facilities available and his own needs and interests.

The preparatory courses have both compulsory subjects and optional subjects. Many students experience difficulties in choosing the right kind of optional subjects. At this stage, they have hardly discovered their own interests and the areas of competence. Hence, in the absence of any systematic educational guidance and counselling, quite a number of students make wild choices or they follow their friends. This unfortunate tendency is seen more among girl students. Many of them select optional subjects for no better reasons than the fact that some of their friends or girls living in the same or the neighbouring street have taken the same optionals. In this respect, the Student Advisers, if we can arrange for them, can render precious service to the baffled young boys and girls. Both staff members and senior students of the college can work as Student Advisers at least in the initial months. This would prevent wastage through failures.

COLLEGE LECTURERS

Selection of instructors-teachers of the Preparatory Classes should not be a matter of unthoughtful set routine or tradition. The young boys and girls cannot be placed under any junior instructor on the college staff. Whoever is assigned the task of teaching in the Preparatory Class should be a good effective teacher.

He should have a pleasant bearing and a pleasant, well articulated and audible voice. A smiling face and a readiness to understand student needs and difficulties will go a long way in establishing

precious rapport between the teacher and the students. He should have confidence and skill to take away the edge from the pranks of students. He should not be touchy and irritable. He should have a sense of humour and must be able to laugh with students. The college principal, on his part, should see that no instructor teaching in the Preparatory Classes develops a distance from the students, and shuts himself off by building for himself an ivory cell of real or pretended scholarship, the reserve and the foppishness of a college teacher. It is better to place a less learned but more pleasant and skilful teacher in the Preparatory Class. Fresh, inexperienced junior lecturers should not be thrown into the lion's den. Many of them were themselves students a year or two before. They have yet to acquire poise, skill and techniques of teaching young adolescents huddled together in a large class. They get easily frightened, irritated and turn into either roaring tigers or meek sheep.

Some of the difficulties pointed out by students of the Preparatory Classes are recorded in a recent study. This study reveals the nature and extent of inadequacies in the teaching at the Preparatory Stage.

Students allege that the lecturers, by and large, speak quite fast, use too much technical words without caring to explain them and use very little examples and illustrations. They find it difficult to grasp their hurried, abstract and heavy delivery and presentation. Quite a number of lecturers either use the black board sparingly or when they use it, the scribbling is so haphazard and flying that they find it very difficult to make much sense out of it. There is little effort on the part of the teachers to establish rapport with the class during the teaching process. Hardly any interaction takes place in the class between the teacher and the students, excepting some hidden mischievous outbursts by some students and the annoyance and the wrath of the teachers and the laughter by the class. Further, there is hardly any scheme for the sitting arrangement of students. Those who go to the class early, get a seat, but for those who go leisurely, there is no accommodation. Unless the lady students get into the class well in time, they find that there is no room for them in the class. Students, when they do not find seats in the classroom, walk away, and sometimes indulge in pranks outside the classroom to make their existence noticed.

Because of such conditions, students tend to take class lectures lightly or indifferently. Only a small percentage of about ten or thereabout do not find difficulties constituting deterrents. A tendency then soon develops among students to look for the dictated class notes or guides and annotations available in the market. A significant number of students also turn to private coaching classes, using college classrooms as a platform for indulging in their adolescent pranks.

This unhappy state of affairs should be earnestly tried to be improved. This poses a great challenge to the ingenuity and earnestness of college principals and heads of Preparatory Classes. The situation in the classrooms is further aggravated by the fact that in the different subjects taught at the Preparatory Stage, there is a disturbingly wide gap between the syllabi at the S. S. C. Stage and those at the University Preparatory Stage. The Boards of Studies in each university should do some fresh and realistic thinking in this matter.

The need of the day is the realistic appraisal of the Preparatory students' difficulties and needs, and doing some pre-planning in colleges for meeting these difficulties and needs.

STUDENTS' PERCEPTION OF REFORMS IN COLLEGES

In May 1969, a three-day Conference of Student Representatives of Indian universities, jointly sponsored by the Union Ministry of Education and Youth Services and the University Grants Commission, met in Delhi. To the Conference more than 80 per cent of the total universities and the institutions deemed to be universities in the country had sent their student representatives.

Among the six major themes discussed at the Conference, one related to curriculum, teaching and examination reform. The Conference divided itself into three committees, one of which deliberated upon this perennial theme. Its recommendations serve to high-light the sordid fact that curriculum, teaching and examination in Indian universities have continued to be sore problems, and one does not know how long they would continue to be a headache to the administrators of the universities.

It is interesting to note what the student representatives had to say on the existing pattern and content of current curriculum, teaching practices and the system of examination in our colleges, the university students' perception of these three vital aspects of higher education need to be noted by the Pandits in our universities who are concerned with them. It is time that they recognise the need of getting precious feed-back from such deliberations of student representatives. Students are the consumers and their views in such matters of vital concern to them cannot be lightly passed over.

CURRICULAR REFORM

Like the many in our society, the student representatives constituting the Committee have felt that the present educational system is outmoded and is not geared to the needs of the society. They are right in saying that the courses should be directly related

to the socio-economic conditions in the country. In fact the Kothari Education Commission has given us a well-planned, phased programme of developing education to meet several national needs including the ones suggested by the student representatives and the national manpower need. But nothing has come out of the pragmatic recommendations of the Commission. A great opportunity for educational reform is lost. Whose fault is it? One thing is certain that we lack determination and dynamism to implement all those things which we say we ought to do in education.

The Committee has said that courses of study should be reviewed and modernised. It should be said to the credit of most of the universities that they have taken steps to modernise their courses of study as far as their resources permit. And the resources of Indian universities are not quite good enough.

The Committee has further stressed, as urgent, the need to evolve a uniform pattern of structure in various courses. Thus, it has regarded it as a crucial factor from the point of facilitating the mobility of students who may like to seek admission in other universities.

CHANGE IN TEACHING METHODS

Students have asked for a major change in the existing methods of teaching being used in university classes. They have expressed their utter disfavour and resentment for the large-scale use of the lecture method, and have advocated its speedy replacement by guided reading and discussion method. The Committee's actual words in this respect are : "Classroom lectures should change into round-table discussions with a view to ensuring a two-way participation in instruction."

These are indeed very vital observations. But in order to be able to adopt such teaching methods in colleges, certain pre-requisites are to be first met with. Discussion and assignment methods can work only in smaller classes. They practically break down in large classes of a hundred or more students. And colleges and universities do not have funds to cut down their classes to such a size which would permit teaching-learning through seminars and workshops. Therefore, though it is highly desirable that teaching methods should be reshaped on the basis of the principles of group dynamics and greater student interaction, very little in this direction is being done due to the unchanging stringent financial conditions of our universities and colleges.

EXAMINATION REFORM

In regard to examination reform in Indian universities, it is possible to implement a good number of suggestions made by the student representatives.

Question papers can be substantially improved by adopting the techniques of scientific planning of question papers and of writing individual questions. This would need a determined effort on the part of universities to orient their teachers into the principles and techniques of educational evaluation. This would make the preparation of questions valid and the scoring of answer scripts reliable.

Similarly, the practice of dictating notes which encourage cramming can be banned by university authorities. More emphasis can be given to objective tests and to problem oriented questions. But the teachers would need to be oriented in the techniques of writing these kinds of questions. The supervision again should be vigilant and sincere, otherwise there would be copying on a large scale in an examination where objective types of tests are used. Objective tests would then make examination more unreliable and of questionable utility.

Students have said that the examinations should be properly spaced out. They have favoured periodical tests as they "help students to share their load and thus enable them to improve their performance at regular intervals".

There is much in favour of continuous and comprehensive evaluation of student achievement. But such a system requires a smaller teacher-student ratio. Continuous testing requires good supervisory facilities and administration. In Preparatory Classes where there are more than two thousand students, continuous periodical tests create many administrative difficulties.

They have also said that examinations should be strengthened by the introduction of Viva-voce. This is a very good suggestion. But Viva-voce becomes an impossible proposition when a large number of students are involved.

The Committee has also made some further suggestions regarding the reform to be effected in the examination system of our universities, viz. laying down a full-proof system of appointment of examiners, framing of rules for moderating assessment of examination answer-books, adopting Letter-Grade System in the place of the existing system of numerical marks, etc.

The Conference of Student Representatives of Indian universities in deliberations on such vital issues as curriculum, teaching and examination is a welcome development. Students' views are in line with the current reforms advocated in these fields by experts. Here dispensers and consumers are in agreement. Now it is for the administrators to get into action!

WHY INDIFFERENT STUDENT ATTENDANCE IN COLLEGE CLASSES ?

Though universities in the U.K. and the U.S.A. are not very fastidious about students putting in a minimum of certain percentage of attendance in college classes, students in these countries are reported to be hardly absenting themselves from classes.

Indian universities usually lay down as obligatory attendance at atleast two-thirds of the total lectures delivered either in individual subjects or in the course as a whole. Even then the problem of inadequate or indifferent student attendance in college classes prevails. It is true that rarely students are prevented from appearing at university examinations on account of deficiency in their attendance. The reason is perhaps that the deficiency in attendance in the case of individual students cannot be established firmly on a fool-proof basis. The form of records as well as the procedures for taking attendance at college lectures are not vigorous enough to establish the facts of deficiency in attendance. Attendance taking in colleges is a routine matter, and the existing practices in them give one an impression that the teachers as well as the administrators are not very much serious about it. The tendency seems to be to mark students present instead of absent as recording absence of any student brings in its trail many problems.

MAINTENANCE OF STANDARDS

Attendance of students in college classes has become an important issue in the context of the maintenance of university standards and of the college discipline. It is contended that it will be very difficult to raise the level of the scholastic attainments of students unless they are made to attend college lectures, tutorials, seminars and the practical work. College lectures constitute carefully planned and carefully prepared learning-experiences for students. Regularity

of attendance is the first pre-requisite for students to be able to take advantage of these learning-experiences. Irregular attendance makes it difficult for students to understand and thereby to take full advantage of the lectures. Students, as they do not follow lectures and textbooks, are forced to read annotated notes and cheap guide-books or join coaching classes. In the Examination Hall, they are tempted to use unfair means because they do not understand the subject and cannot cram everything in the subject. All these have undermining effects on university standards.

POOR COLLEGE LECTURES

But this issue has another dimension. When attendance in college lectures is made obligatory, it presupposes that lectures are of real scholastic merit—something which students would not get from elsewhere (say, from books, notes, etc.), so something which they would really miss if they do not attend them. About how many lectures that are delivered in our college classes, can we say that they are of real scholastic merit or of real teaching-learning values?

Students allege that what they get from their lectures is often from a few books and that, too, almost straightway reproduced from them. Often the reasoning, illustrations and even the language are reproduced without much difference. Why should they be then forced to attend lectures from which they do not get any fresh ideas and or new knowledge at the same time which tire out their minds?

It is also revealed by students that in under-graduate classes, it is a practice with many teachers to dictate notes. If note-dictating is the major method of teaching, where is the justification for all students to attend the classes all the time? Students can work out some arrangement among themselves and attend classes according to their turn. Or, if the teaching is to be done by note-dictating, then where is the need for any student to attend the classes at all? The notes can be printed and distributed among the students. Why make a false show at all?

EXAMINATIONS

Students also allege that the lecturers usually set questions in periodical examinations from their lecture notes. Even most of the questions set in university examinations are also such as can be very well prepared from guide-books. This takes away much of the importance of attending college lectures. When one can

pass an examination by reading lecture notes or guide-books only, where is the motivation for attending college lectures? What is the justification for making attendance compulsory?

THE DIFFERENCE

In the colleges and universities of the U.S.A., students hardly remain absent in college classes. The reason is that teaching, learning and examination in that country are organised on a different pattern. The American university teacher hardly delivers lectures in the sense in which his counterpart in India does. Lecturing by the teacher is minimum. There is more of exposition and discussion. In this both the teacher and almost all students participate. It is joint thinking, sharing of knowledge, views and experiences. American—and even English—university classrooms are full of interaction among students and between teachers and students. Each student is required to prepare assignments given by the teacher. Thus, the students read and so does the teacher. Both the parties—students and the teacher—come well-prepared on the assignment which forms the starting-point and the base of discussion. A real intellectual climate prevails in the classroom.

In Indian universities, we still believe in teaching through lecturing. This hardly stimulates even few of our students. Teaching and learning both become a formal and a dull affair. Gifted teachers, of course, create life and zeal in their teaching. But such teachers and such creative teaching are becoming rare these days.

If enforcement of college attendance is really to be made a sensible thing, then college teaching needs to be thoroughly renovated!

: 8.12 :
**STUDENTS AND UNIVERSITY
CONVOCATIONS**

There was a time hardly two or three decades back, when a University Annual Convocation used to be a big event on a university campus. It had its traditional glamour, august grandeur, solemn dignity and exhilarating excitement.

For the university administration staff the whole week preceding the day of the Convocation was of intense and mounting activity and full of stress and strain. For students it marked the fruition of their and their parents' long cherished dream. Graduating students would travel long distances away from their homes to participate in the Convocation function.

The receiving of diplomas or degrees donning their colourful academic gowns and that, too, at the hands of a high dignitary like the University Chancellor, who is usually the Governor of the State, was considered by students a proud occasion long to be cherished in their life. It was considered a proud privilege and great pleasure by Faculty Deans, University Senators and the Syndics to participate in the solemn and august ritual of invoking and passing Grace for the admission of the qualified graduates to University Diplomas and Degrees.

Those were the days when students and the society valued university diplomas and degrees highly, perhaps because the employment market for young graduates was then not bad if not bright.

NO MORE EXCITING

Things seem to be changing now. Though a Convocation Day continues to be a day of hectic activity for the administrative staff, it seems to have lost its former glory and excitement. It has begun to lose its previous interest and attraction for students and teachers alike, and even for the Senate Members who are involved in passing the Grace.

Students who show keenness in passing university examinations seem to lose all their enthusiasm for university diplomas or degrees. A cry is being raised by graduating students in some of the universities that 'they want jobs, not degrees'. With the diminishing of the job value of diploma and degree certificates, the enthusiasm for receiving them, and that, too, in person, has almost gone. A large number of graduates know that they are not going to get any job. They shudder at the idea of continuing to be a burden on their parents. The frustration is more in young men than in young women.

Quite a significant number of students do not bother to apply for their degree certificates. Of those who apply a large number prefer to receive their degrees in absentia. Some facts revealed by the 1969 Convocation of the M.S. University of Baroda illustrate this point.

THE BARODA EXAMPLE

At the Baroda University Convocation held on the 22nd November 1969, 2,164 students received their diplomas or degrees. Of them around 930 or 43.1 per cent elected to receive their degrees in absentia.

A doctoral degree, being the highest academic qualification, one would like to receive in person. But 9 out of 22 doctoral students at Baroda chose to receive their degrees in absentia. Similarly, if a degree is earned in the First Class, it should be a proud achievement for the student, and he or she would wish to receive such honours in person. But the example of the Baroda University at the Convocation showed that out of the total 403 students who received their degrees in the First Class or First Class with Distinction, 208 students or more than half preferred to receive it in absentia. The sex factor in respect of those 930 who received the degree in absentia was to the extent of 25 per cent women students.

It is true that students who choose to receive their degrees in absentia do so because either they are far away from the university place or are already in employment or are prevented by reasons which they cannot control. Still there is a sizable number of students who do not go to the Convocation simply because they do not find any fun or value in it. They do not have that excitement or keenness or even interest which the students in the past

felt about receiving university degrees. University Convocations seem to have lost their glamour as well as their value and significance.

These facts necessitate rethinking about University Convocations.

MONOTONOUS RITUALS

Some of our universities continue to have the traditional elaborate rituals for their convocations. For instance, they require the students to file in column in a particular order, subject them to a ritual of rehearsal of how to move forward to receive the Grace, how to make a bow to the Chancellor and how to walk back to their seats, etc.

The invocation and passing of Grace, for the admission of students to different degrees, the Chancellor's welcome speech, the recital of rituals in admitting each group of students to their respective degree and the formal way of charging them to prove themselves in their life and conversation, worthy of the degree awarded to them—these rituals are the legacy of the past. They indeed have their glamour. They do help in creating a psychological climate. They demonstrate the solemnity of the fact of admission of students to degrees and diplomas. They also help in building up a much needed ethos in and about the University.

But people now seem to have lost interest in such rituals. Times have changed. Values and perspectives have also changed. Such rituals are now looked upon with disfavour as they are considered the relics of the past. The rituals at Convocation are very elaborate and time-consuming. They slow down the tempo. They tire out both the students and the audience. A change is, therefore, warranted in the traditional rituals at the Convocation.

People want things to be done quickly and gracefully and with some fun and excitement. It would be better to make the passing of Grace brief. The Grace can be passed *en masse* to cut the time short. The groups of recipients of different degrees may not have elaborate recital in the Chancellor's address. Only the recipients of gold medals and other academic distinctions should have distinctive but brief ritual. Everything—the march of the Convocation procession, the passing of Grace for the admission of students to various degrees and diplomas and the Chancellor's welcome speech put together should not take more than 30 to 40 minutes. And the whole Convocation should be over in an hour or so.

At the Convocation a national figure of eminence of great scholarship and excellence in a field that has a bearing on university education is usually called upon as the Chief Guest to deliver the Convocation Address.

Usually, these Convocation Addresses are read from prepared text. Unless one is able to read the written address effectively—and this is a gift which is possessed not by many—the Convocation Address becomes an inflictment on the audience. It is, therefore, more desirable that the Chief Guest delivers his lecture extempore. The audience and the students particularly would then enjoy his or her speech. The printed text of the address has its value. It may be distributed among the audience for their more leisurely perusal.

There is another aspect of the Convocation Addresses which also need rethinking and change. These Addresses need not be in English. They would serve their purpose much better if they are delivered in the regional language or in Hindi in the non-Hindi speaking regions.

This was exactly what was done at the recent Convocation of the M.S. University of Baroda. The students of the University requested and the Chief Guest Shri Shriman Narayanji, the Gujarat Governor complied—that the Convocation Address be in Hindi. Shri Shriman Narayanji spoke for half of the time extempore in Hindi. This had such exhilarating and stimulating effect and many wished that the entire address should have continued in Hindi. Everybody enjoyed the Hindi speech, which actually proved to be more effective than when later on the Convocation Address in English was read out by the Rajpalji for the benefit of those in the audience who did not understand Hindi.

A time has come when we should be reconciled to Convocation Addresses being delivered in regional languages or in Hindi. And Goddess Saraswati is not going to shower her anger on the academic world for having the Convocation Addresses in an Indian language.

The University Convocations need rethinking and change.

AREA 9 :

ADMINISTRATION, FINANCE AND CONSTITUTION OF INDIAN UNIVERSITIES

The Vice-Chancellor cannot escape the repercussions and the influence of political parties. In this democratic age, the universities cannot exist in isolation and politics must have its impact on university life, but I consider that this impact should not be one-sided. If after all, outside influences are trying to affect university life, why is the latter not so well integrated as to influence the life of its surroundings? This is a question I should like to ask of those who are in charge of the universities, and whatever we might say to the contrary, there will be political parties and they will even be influencing the Union elections. When we are permitting freedom of thought amongst teachers, there will be persons with different political ideologies—Congress, Communist or Socialist. But, as long as these teachers are devoted to their subjects, their teaching and research, and do not disturb the life of the university, there should be no difficulty. I can say from my experience of the University of Allahabad that all these political parties are represented amongst the teachers and the students. After all, they think over most of the problems, and discussions and symposia must be allowed freely in the University Union. But the only thing to observe is as to how tactfully such activities are not allowed to permeate the regular life of the university. This is where some check is needed, and if the Vice-Chancellor has his influence over the staff and students, there is no reason why there should be any trouble from political parties. We must try and stand up against this end, if there does arise a situation when there is Government interference to such an extent that it is impossible for the Vice-Chancellor to function independently, then, of course, he has come to a stage when he should be able to fling in his resignation straightway. However, such a situation comes about very rarely.

—Vice Chancellor B. N. Jha

UNIVERSITIES AND THE STATE

The Indian Constitution has placed all education including University education under States. So a State decides whether university is to be set up or not, and if it decides to set up university, then it determines how, when and where it is to be set up. The State, no doubt, usually consults the University Grants Commission regarding the establishment of new universities, but such consultation is not obligatory on the part of States. There are instances where such consultation has not taken place in the establishment of some new universities. In any case, the ultimate authority lies with the State Government. The State Ministry draws up the Bill framing up the constitution of the proposed new university and it is the State legislature which ultimately decides the details of the constitution and legislates thereon. It is the State legislature which subsequently decides all issues of the amendments of one or more provisions of the Acts incorporating the universities of the State. In this way a State Government wields complete authority so far as the establishment and the framing of, and later on of the amendment of these constitutions of the universities set up by it.

NO DICTATING ROLE

But, the State Ministry does not play an over-whelming and dictating role in the establishment of a university. It has to be responsive to the views and directives of the political party to which it belongs. It has to accommodate, to a certain extent, the views and the wishes of the opposition among the political parties represented on the State legislature. Very often the establishment of new universities or the amendment of University Acts are done on the basis of the recommendations made by specially appointed Committees which collect the views of the university

teachers, students, various public bodies and institutions, associations of school headmasters and teachers, and so on. Of course, the persons who sit on such Committees are chosen by the Government. What has been happening in most of the States is that usually such persons are placed on the Committees who are in the good books of the Government and whose views and decisions are not likely to embarrass the Government. Even after such Committees have made their recommendations, it is always left to the Government to accept them with or without modifications or shelve them altogether. This ultimate power of the State Government is justified on the ground that it is the duty and responsibility of the Government to view the recommendations in the total perspective of the needs and resources of the State as a whole. A State is a social welfare machinery which has to cater to the needs of several types and kinds of welfare activities and programme for the people, and universities are not its only obligations.

Questions like the medium of instruction, the appointment of nominated members on the Senates of State universities, approval of Statutes passed by University Senates and the mode and the extent of grants-in-aid to universities are some of the things in which State Governments have the authority. But even in the exercise of the authority on these and such other issues, the State Government does not enjoy and exercise absolute powers.

Unless a University Act lays down in its body by enacting a section that a particular medium of instruction will be followed in the university, it is left to the Senate and the Syndicate of the university to decide what the medium of instruction and examination it should have for its own departments, constituent and affiliated institutions. That is why in the State of Gujarat, the Baroda University is able to retain English as the medium of instruction, while it is definitely known that the Gujarat Government favours the regional language as the medium of instruction at the College stage. The Universities of Gujarat, South Gujarat and Saurashtra have Gujarati as the medium of instruction in their institutions because their Acts of incorporation provide for the regional language to be used as the medium of instruction.

The nominated members of the Senates of different State universities are no doubt appointed by the State Government. But the recommendations in that regard are made by the Vice-Chancellors of the universities on the advice of their Syndicates. Usually, the State Government accepts the names sent by the Vice-Chancellors.

in toto. Strangely enough, some University Teachers Associations want the State Government to interfere in this respect by rejecting certain names and accepting others. This is to invite the State Government to interfere in areas in which it has so far kept itself aloof. If the U.T.A.s want that only educationists and public administrators of renown having genuine and active interests in the conduct of the university are to be nominated, they should start a dialogue at the levels of Vice-Chancellors and of the Syndicates. It would be suicidal to invite government interference in any issues pertaining to freedom that is already being enjoyed by universities.

It is possible that Statutes passed by a University Senate may have financial implications, and they have, therefore, to be referred to the State Government for its approval, as the latter may have to pay more on their account. There is also a provision in most of the Acts of universities that if the government does not refer such statutes back to the Senate within a period of six months since the receipts of them (i.e. the Statutes) by the government, they automatically become valid. This should be observed. It is difficult to question the right of the State Government to examine statutes so far as the financial university implications are concerned. However, conventions should be developed to the effect that unless the financial implications of the Statutes passed by a university are serious, the State Government should accept the decisions of the University Senates which are arrived at through democratic processes of considerable screening and discussions first in the small body of the Syndicate and then by a large body of the Fellows.

STATE GRANT-IN AID

The greatest bitterness and disappointment in university circles is regarding the State grant-in-aid. It is alleged that most of the State Governments in India starve universities and institutions of higher learning of needed funds because of their declared policy to accord the top priority to the programme of universal, compulsory and free primary education. Not only are the State Governments giving inadequate grants to State universities, but are also creating many difficulties in determining their triennial block grants. I have already discussed this issue in the paper relating to financial difficulties of universities. Readers may kindly refer to this paper in this book*. The point that is emphasized is that State Govern-

*Vide-Pages 391-402

ments rely too much on the notings made by the clerks in the State Secretariat who have their own ways and methods of showing their ingenuity and cleverness. But this delays and hinders universities' programmes of development. There are instances in the case of some State Governments that the notes of the State Directors of Educations, who know the needs and problems of universities intimately (because they are the ex-officio members of university syndicates) in regard to the block grants due to them are disregarded and the notings of clerks in the Secretariat are given greater importance by Education Secretaries, and on account of their advice, by the State Education Ministers. The delay in the sanctioning of State Block Grants has resulted in deficit budgeting in many universities and forcing them to have over-drafts of banks.

RESPECTING UNIVERSITY AUTONOMY

Excepting a couple of States, the States in India are behaving fairly well with their universities. In the four academic freedoms highlighted by J. B. Davies¹, who may teach, what may be taught, how it shall be taught and who may be taught, there is practically no interference by the State. A university has to be responsive to the needs of a developing society. In this respect, universities and State Governments have to become partners and place their resources in the service of the community. If a State Government advises a university to take up a certain programme of development under the Five-Year Plans and offers to aid it suitably, the university is then duty bound to consider the proposal and decide to co-operate. However, a State Government cannot force the hands of a university to introduce new programmes or particular courses in a particular way or increase its enrolment without giving it adequate financial support. And a university will decide such proposals after their merits having been examined properly by its academic bodies. A university cannot be equated with aided private schools. Government Education Departments have been habituated to control and direct the recognised private high schools. They cannot behave in the same way with the universities. And to be fair to our State Governments, it must be said that most of them have honoured the autonomy of the universities.

The tradition of relationship between universities and the State has been, on the whole, healthy in India. The State has

accepted the fact that universities have privileges of their own which are to be respected by the government and the latter has been doing it to a large extent. Recently, on the advice of the U. G. C. and on the recommendations of the Model Act Committee of the Union Ministry of Education, of the Kothari Education Commission and of the Inter-University Board of India and Ceylon, State Governments are revising their University Acts and improving their own functioning in relation to them.

SOME TROUBLED AREAS

However, some of the areas of trouble still persist. Foremost among these is the manner of determining the block grants and supplementary grants to universities to wipe out their deficits. The second area pertains to the appointment of Vice Chancellors of State Universities. It cannot be said that State Governments completely keep themselves aloof in the appointment of Vice Chancellors and permit this issue to be decided on merits and on educational considerations. It is feared that State Governors who are the Chancellors of State Universities are largely influenced by the State Governments in selecting the Vice-Chancellors out of the panel of the three names placed before them by the three-man committee constituted as per the provisions of the State University Acts. This usually happens as the State Governor and the members of the State Ministry are drawn from the same political party and the State Governor usually acts as he is advised by the State Government. If a convention is built up to the effect that the Chancellor acts on his own—that is as Chancellor and not as a Governor, this difficulty would be overcome.

DESIRABLE CONVENTIONS

There should be firm provisions in University Acts that political persons shall not be appointed as functionaries of universities as Vice-Chancellors, Rectors and so on.

Some further conventions should also be built up. The courts of justice should refuse to entertain writ petitions from teachers or students against the decision of a university, unless they relate to the alleged mis-interpretation or wrong practice by university authorities that cannot be upheld as justified and valid under the University Act. There is a strong body of opinion among the university people that all grave disputes of students and teachers which involve writ petitions be referred to the Chancellor

and it would be he rather than a court of justice who should decide the issues. Convention should also be evolved to the effect that all disagreements between a university and the State Government should be resolved by the University Grants Commission.

The power of affiliation, which is often a sore point in the relationship between a university and the State Government, may rest with the latter. However, the Government should not force the decisions about the affiliation of private colleges when the Syndicate and the Senate of the university have resolved against the granting of affiliation in the case of some colleges on academic, financial and administrative grounds. And Government should not grant affiliation without the prior recommendation of the university. Of course, it should retain the powers to refuse affiliation even if it is recommended by a university on financial grounds.

BOTH PARTNERS

The State universities and the State should look upon themselves as partners in the service of the community. As Sir Eric Ashby puts, "universities are all members of a supranational community and they serve their local communities by supplying them an international commodity—scholarship, science, technology, medicine—on international standards." In these, universities should have all freedom and there should be no pressure from the State. Universities must be loyal to cosmopolitan traditions of what universities stand for, otherwise they fail to fulfil their national purposes. The State should realise this, and assist universities both by positive help and by refraining from exercising any interference or creating obstacles, financial or otherwise, that come in the way of universities fulfilling their dual functions. Confidence should be created in universities, as it is done in Gujarat, Maharashtra and several other States, that the State will not interfere. This cannot rest on the law, but upon the convention of the university constitution.

GOVERNMENT AND PRIVATE AGENCIES IN THE ADMINISTRATION OF HIGHER EDUCATION

THE THREE MAIN PARTICIPANTS

The main participants in the onerous affair of promoting and developing higher education in India are three, viz., the Centre, the State and the private management. The roles of the first two are determined by the provisions enshrined in the Constitution of India and that of the third by the educational policy pursued by the Centre and the States. Under the present policy, highest priority is accorded to universal elementary education and the next highest to secondary education, thus leaving the growth of higher education largely to private agencies.

The Constitution of India vests the State Governments with almost absolute authority in education including university education, leaving to the Centre only a limited role of offering advice, providing leadership, effecting co-ordination of developments, and determination of standards in institutions of higher learning, research and higher scientific and technical education. The Constitutional position, therefore, is that, barring the question of the maintenance of standards and co-ordination of development, university education is a State preserve. But this is an apparent position. In reality, the Centre has cut into the State preserve in almost all the sectors of education including higher education and the States are made to play increasingly a more and more subordinate role than was the case even before the attainment of independence. Simultaneously, an increasingly greater burden is being placed upon private enterprise than even before, though correspondingly larger financial assistance is also being provided to it. The establishment of the University Grants Commission is an event of major significance in the development of higher education, but it has strengthened and helped university colleges and departments rather than private

affiliated colleges, a significant number of which are hardly better than glorified secondary schools.

CENTRALISATION-IN POLICY-MAKING— A MARKED TREND.

As pointed out, the apparent Constitutional position is that States are the main determinants of the nature, size and pace of development of higher education in their own territories. The actual position is otherwise. Since the attainment of independence in 1947, the Centre has shown a more pervasive and a more active interest in the development of all the sectors of education including university education. Three events of great significance have relegated the role of the States to a subordinate position, giving a dominant and decisive position to the Centre. One relates to the fact that substantial grants are now being made available to the States by the Centre to undertake, on a large scale, a variety of programmes for the internal transformation and enrichment of different fields and types of institutions. The second major event is the launching of a programme of reconstruction and development of education through the *Five Year Plans*. This has shifted the focus of authority to the Centre, as it fixes the priorities and allocates funds for planned development. The third great event has been the establishment of the *University Grants Commission* which has been, since 1953, the main agency of the Union Government to co-ordinate developments in higher education, determine standards and disburse grants to all universities. The institution of the UGC and its increasing activities in the field of promoting and strengthening developments have again considerably limited the absolute authority vested in State Governments in respect of higher education. These three events have had such a tremendous impact on the administration of higher education that the powers relating to education given by the Constitution to States have lost their edge and the real authority in policy-making has passed into the hands of the Centre. Shri J. P. Naik is right in his observation that in the post-independence period, centralisation in policy-making in all fields of education has been the most dominant note and it has had hardly any parallel in our educational history except for a brief spell under Lord Curzon.

The formation of non-Congress Governments in some States as a result of the General Elections of 1967 has marked a process of change in the situation to a certain extent. It has posed some challenges to the educational leadership of the Centre and has

affected its commanding stance in policy-making. Some States have been trying to assert their constitutional position and press for Central aid in education without any strings attached to it. This trend towards the States' pressure for greater power to determine their own policies had been checked to some extent by the convention established to get bigger and vital issues considered by committees of Parliament, State Ministers' Conferences, meetings of the CABE and conventions of the Vice-Chancellors. However, it seems likely that the current centralised role of the Centre will undergo a substantial change in the next few years and the authority to make their own educational policy will pass, to an appreciable extent, on to State Governments.

NEED FOR UNIFORMITY

The shift from centralisation to decentralisation, whenever it comes, should not be sudden, nor should it be in an extreme form. In a developing country, some centralisation is necessary, at least till such time as development is achieved and equality of educational opportunity for all has become an accomplished fact. There are several issues of crucial significance and of far-reaching consequences in the administration of higher education which need for their effective handling, some kind of centralisation and an all-India policy. For instance, the question of the autonomy of the university system as a whole in relation to the State Government has become a very sensitive issue. Attempts have been made by some State Governments to amend the Acts of incorporation of their universities in such a way as to constitute a serious infraction of university autonomy. Most of the university Acts were enacted during the British regime to meet the needs of the political regime then in existence. These Acts need to be reviewed and brought up to date in the light of the changed needs of the society and the current outlook on university autonomy within the university itself, within the university system and for the whole system in relation to outside agencies including the State Government. The national objective in higher education, the reorganization of the structure of higher education, the question of restricting the growth of economically unviable affiliated colleges, the need for increasing the working and instructional days, adequate utilization of institutional facilities, better use of college vacations, uniform salary scales for all teachers in higher education according to their qualifications and experience, setting up adequate, dynamic and interna

tionally comparable standards promotion, of a higher quality of postgraduate research and a score of such other vital questions necessitate a kind of uniform all-India policy in higher education. Therefore, the kind of Central role which gives sufficient freedom to the States and to individual institutions, including universities, to make experimentation and introduce innovations in teaching, training and research, without creating any administrative steel-frame, is necessary. It is possible to do this through more joint meetings of the Central and State Ministries of education, Vice-Chancellors' conferences, conventions of university teachers and the joint conferences of the managements of affiliated colleges, university administration and the UGC.

THE GOVERNMENT COLLEGES

The Hunter Commission had recommended the gradual withdrawal of provincial Governments from the direct management of colleges and their transfer to Indian managements some eighty-five years back. This recommendation was not implemented faithfully during the British rule with the result that the category of Government colleges has persisted even to the present day. In 1961, of the total affiliated colleges, 32.9 per cent were Government-managed. The present figure is about 30 per cent. The continuation of Government colleges in such a large proportion has been a big hurdle in achieving uniform standards of pay-scales for college teachers, uniform service conditions for them and even maintaining uniform standards of teaching and evaluation. The staff of these colleges is never stable, with the result that the loyalty of the staff to such an institution is seldom found and never generated. The UGC is of the opinion that the Government should withdraw from the direct managements of affiliated colleges and should transfer them to the universities. The Kothari Commission feels that the question of the transfer of Government colleges to non-government managements should be settled through different approaches to suit local conditions and traditions. Of the three ways suggested by the Commission, the third one which is based on the Delhi practice wherein each Government college has been placed under an autonomous Board of Governors seems to be the best.

THE PRIVATE COLLEGES

For historical reasons, the bulk of affiliated colleges in Indian universities are private. About 75 per cent of the current enrolment

in institutions of higher learning is in private colleges. Results of some of the studies made by the Kothari Commission show that one in every six colleges in India has no more than 100 students, and yet the establishment of sub-standard colleges with an inadequate financial base continues unabated. The small, uneconomical, private affiliated colleges pose one of the most intriguing and baffling problems, and a serious threat to the maintenance of adequate standards in higher education. Although the enrolment in our universities has not yet reached the saturation point in comparison to that in other countries, there is a strong case to restrict the establishment of small colleges. Of a total of 2,572 colleges in 1965-66, 1,691 or 65.7 per cent were small affiliated colleges, and they were mostly arts, science, and commerce colleges. In 1965-66, 81.2 per cent of enrolment was in arts, science and commerce colleges. There is a need to restrict the growth of enrolment in arts and commerce disciplines and step it up in other faculties like education, engineering and technology, medicine, agriculture and veterinary science. If private colleges are to be established, they should be more in the field of professional and special education. There can be a greater share in the administration of the PUC/inter, pre-professional courses. In 1965-66 out of the total enrolment of 17.29 lakh in universities, 6.62 lakhs or 38.2 per cent were in Preparatory University Classes. This huge proportion of pre-university enrolment is a serious strain on the meagre resources of universities and large-size colleges. These students should be transferred to higher secondary schools through a phased programme as suggested by the Kothari Commission or to junior colleges, reorganising some of the present small colleges to form this new category.

Another vital issue to be considered in the case of private affiliated colleges relates to the simplification of the grants structure. The tuition fees charged by the colleges need to be standardised on a more rational basis. A grant-in-aid system for them should be so developed as to meet all their teacher costs and non teacher costs minus a prescribed contribution of the management and the income from tuition fees. As the Kothari Commission has rightly observed, the contribution of the college management should vary from State to State and from area to area, and that the rate of such contribution should be reviewed and revised, if found necessary, every five years. The State Government should consult the universities concerned from time to time in the matter of fixing the

upper ceiling of tuition fees, the student-teacher ratio to be observed in colleges, the laboratory, workshop and library facilities each private college should have, and determine the grant-in-aid policy for each college accordingly

As the grant-in-aid involves teacher cost, it is necessary for the State Governments to achieve an understanding with the UGC and the Union Ministry of Education on uniform pay scales for college teachers. In June 1963, the Ministry laid down a programme for effecting the new UGC scales and even drew up an estimate of Rs 265 crore to be disbursed in five years. But it was alleged that some States went back on their commitment to meet the Central grant with their matching share. Such an attitude on the part of State Governments creates an embarrassing situation for the Centre as well as for the private and university colleges and makes the strengthening of higher education difficult. Thus, much depends upon how far States are prepared to make sacrifices for the promotion of higher education.

IMBALANCES IN HIGHER EDUCATION

Socio-economic surveys and educational studies in higher education carried out so far in India point out that the benefits of higher education are not spread evenly between men and women, between rural and urban areas, among different sections of the community and among different districts in the same State or the Union Territory. In 1965-66, it was estimated that for every 100 men students at the university stage there were only 24 women students in general education courses and only 14 in professional courses. There has also been considerable imbalance in higher education among States. In 1960-61, according to one study, out of every 10 000 of population the average number of student-enrolment in higher education ranged from 8 in Orissa to 40 in West Bengal with 4 States having less than 20, 8 less than 30 and only 3 between 30 and 40. Another study points out that nearly 70 per cent of the students in institutions of higher learning in science, engineering and medicine come from urban areas and the figure rises to 80 in institutes of technology. Nearly 40 per cent of students in the institutes of technology come from an income group of less than Rs 500 a month. Nearly 28 per cent of students in engineering and 41 per cent in medical colleges come from families whose income is less than Rs 150 a month. It is true that these figures which reveal larger enrolment from rural

areas and low income groups, indicate a great revolution in themselves when compared to the situation prevailing in this respect in the pre-independence days. However, the over-all position is not ideal. Any administrative move to correct this imbalance in an arbitrary way would be harmful to the cause of higher education and would adversely affect university standards. One of the more fruitful approaches might be to strengthen school education in rural areas and to make it (i. e. school education) available to girls and students in the low income groups rather than concentrate all efforts on ensuring larger enrolment (in higher education) from rural areas and low income groups.

The problems relating to the education of the socially and culturally backward classes constitute another area of imbalance. As a step towards meting out social justice and bridging the wide gap in their education, seats are reserved in almost all States and Union Territories for students of such classes. Nobody challenges the fact that all possible efforts should be made to enable the lower and backward classes to lift themselves culturally, educationally and economically. But, reservation of seats in colleges, admitting students on considerations other than academic, is both democratically unpalatable (since it confers privileges on certain sections of the society) and educationally damaging (since it contributes to the fall in standards). A Baroda study points out that only a few of the students of the scheduled castes and tribes admitted in colleges of engineering and technology only on the basis of their social position, successfully complete their courses; most of them drop out, because they do not possess the necessary intellectual equipment. The situation is more serious in the professional colleges where the intake capacity is limited and the qualified applicants exceed the number of available seats almost three to four times. The question of reserved seats for students from the backward classes is a socially sensitive and politically explosive issue. The administrators of higher education including the Government can best deal with the difficult situation by following the course of action recommended by the Kumara Pillai Committee of Kerala. It enjoins that among the backward classes only students from families whose total income is less than Rs. 4,200 per year should be eligible for reservation. The Pillai Committee rightly feels that there is no need for reservation of seats in the arts and science colleges for the undergraduate courses and

in the law and Ayurveda colleges and recommends a reservation of five per cent for ten years in the postgraduate courses in arts and science colleges and for a similar period the reservation of 25 per cent in all professional colleges. This is on the present practice of allowing reservation of 35 per cent or more for the backward classes in all colleges. The Committee's recommendation which, barring the nominees of college managements and of the Government of India, leaves 70 per cent of the seats in professional colleges to merit alone, will also help in abolishing admission criteria prevalent in various professional colleges. The Pillai Committee's recommendations, if adopted in all States including Kerala for which they were primarily meant, would considerably help in balancing the role of the Government and private enterprise in the administration of professional education.

CONCLUSION

Higher education is an extremely vital sector of education. Its administration has suffered considerably as a result of the policy of the Government to accord higher priority and apportion larger funds to elementary and secondary education. The heavy burden thrown on private enterprise has its roots in this policy. But for the prominent and effective role played by the UGC in general higher education, the All India Council for Technical Education in technical education, the Council for Scientific and Industrial Research in science education and research, the Indian Council for Agricultural Research in agricultural education and the NCERT in teacher education and the research, the role of the Government vis-a-vis private enterprise in the administration of higher education would have been inadequate. Private enterprise has its own inherent short-comings and weaknesses. Affiliated colleges pose many problems of inadequate college plant, equipment, library, laboratory and workshop facilities. Their weaknesses are more telling in the fields of science, agricultural and medical education. Public pressure for the admission of students in science, medical and other professional courses has been greater in these institutions. The rising tempo of development of higher education as indicated by almost the eight time increase in the enrolment in colleges in the post-independence period will continue to pose several challenges to private managements in the matter of providing greater instructional study and research facilities. They would need more and better buildings, library books, modern

laboratory tools and materials, well-equipped up-to-date workshops, hostel facilities and study halls and centres for day scholars. An extensive and effective programme of student welfare has yet to be developed in most of the colleges including Government and university institutions. This would require a greater appreciation than is the case at present of the role of the private enterprise in the promotion and development of higher education and a real concern on the part of the Government to strengthen their finances by a more imaginative and generous grant-in-aid system. This applies to university institutions, too. Government, universities, the UGC and the all-India councils in technical, agricultural, science, and medical education including the NCERT on the one hand and private managements on the other should have a closer relationship based on a meaningful understanding of the needs of higher education in various fields in the context of the manpower needs of a developing economy. The roles of the Government and private enterprise need better co-ordination, greater feed-back and a continuous review and revitalisation.

THE CHANGING ROLE OF THE COLLEGE PRINCIPAL AND HUMAN RELATIONS

One of the major causes of student strikes and strife and of indifferent participation of the teaching staff in the programme of better teaching, training and research work of university departments and colleges is the poor leadership qualities and bad or indifferent human relations exercised by their Heads. It is sad that while school administration has been moving away from bureaucracy and high handedness to one of democratic functioning, instructional leadership and good concern for human relationship with students, staff and the society, the college or university administration still prefers to function in the old traditions of brow-beating bureaucracy, snobbish prudery, intellectual, status-based isolation and rigid allegiance to rules and regulations. This embitters students, frustrates the teachers and irritates the society.

There is a crucial need to place college and university administration more on human and social plane, to direct it more toward the achievement of educational goals rather than running a machinery, to free it from the rigid, unimaginative, mechanical adherence to rules and to gear it to the achievement of educational outcomes bringing about desirable behavioural changes in students and helping the teachers to attain their professional growth. The college and university administration has to undergo a change in its goals, values, practices, relationship and attitudes. Rules and regulations are, of course, important—nay, very important. Without that no administrative machinery can function. But rules and regulations do not constitute the beginning and the end of administration. The goal is better learning, better training, better research. If this goal is not achieved, if an administration takes delight and pride in the mere implementation of rules in words, not in spirit, the administration loses its real purpose and focus.

THE BRITISH LEGACY

College and university administration is a legacy of the British. When, in the latter half of the nineteenth century, colleges began to multiply, Indians were not considered fit to be college principals. The Indian intellect, competency and integrity were at discount. Only the English principals were preferred. To these nineteenth century and early decades of the twentieth century English college principals and their counterparts in England goes the credit of developing the concept, the principles, the attitude and the practices in college administration. When the private enterprise entered the field of higher education, when it gathered momentum especially towards the close of the nineteenth century and when Indian intellectuals began to be appointed as college principals, they mostly imitated the Englishmen and followed their traditions and methods, probably because they did not want to appear different from, and below the grade of, the then English college principals. A picture of an Indian college principal began to emerge and get gradually stabilised—a gentleman with a deep scholarship in one of the disciplines of higher education, a kind of a bureaucrat, a strict disciplinarian so much so that not only were the office staff and students but even the members of the teaching staff afraid of him. He was a kind of a *Raja* in his own kingdom which was a college. He relished in living in ivory isolation. It was felt that more the distance he maintains from the society, it is better for the college discipline and better for the college standards. His personality developed into that of an august, imposing, terrifying administrator and a teacher. He spoke and wrote in measured words. So were his action and public-dealings. He was wedded to rules and regulations.

The older concept of educational administration had put premium on conceptual skill and technical skill which enabled an administrator to relate all his tasks that were considered important. The one skill,—that of human relationship—which is now considered indispensable in the college and university administrator—in fact in any administrator—had not emerged at all at that time.

Though the Britishers have gone, most of their educational machinery, practices and attitude continue even to-day. Not only that, new justifications are now being put forward to retain these old practices. Industries have adopted the techniques and methods of effective personnel services, and have stepped up their output

and productions significantly. Educational administration should learn from industries the art and science of the personnel administration, staff motivation, staff morale and constant evaluation of their work procedures and techniques so that more and better educational output may result.

SOME DESIRABLE QUALITIES OF THE COLLEGE PRINCIPAL

A college principal or a departmental head is an institutional leader. He acquires his unique position in the institution from his position as a head. He has thus a natural status leadership. But he should not merely rest on his status leadership. He has to be a leader. He should justify himself as a leader.

Firstly, he should be a straight-forward man. He should be straight in his dealings with his teacher-colleagues, students and office staff. It does not pay him to be scheming or intriguing, to adopt a policy of divide-and-rule, and favour some and downgrade others. He should be open-minded. This is necessary to earn confidence and good will of his staff and students.

Secondly, he should be friendly and easily available. No student, teacher or clerk should feel either nervous or backward or frightened in meeting him. Whenever he is free, he should be ready to meet any one who wants to see him. In fact, he should create, by his words, behaviour and tradition, such a climate in the institution that anybody feels free to go to him to share some views or experience, to get advice and guidance and to place before him his difficulties and demands. Many administrators talk more and listen less. They love to make a show of their knowledge, skills, experience, authority, competence, etc. The staff and students of the college will not feel free to approach the principal if he has these short-comings. Before saying anything, he should learn to wait, listen to and establish a rapport by appearing to be friendly and interested. It is such an approach that will endear him to his colleagues and students.

Thirdly, he should try to wear a smiling face when meeting a colleague or a student. This is necessary in creating a friendly climate. He should never allow himself to be owl-faced, appear dull, disintegrated or irritated. His dealing, even with a junior teacher, should be friendly and courteous. Sweet words and courtesy will not cost him any thing; but it will buy for him the abundant good will of his colleagues, and of the local community.

Fourthly, he should be democratic. He should involve his colleagues in the decision-making process. He should never dictate. He may provide guide-lines or discussion points. But most of the decisions pertaining to curriculum, teaching and examination should be taken at the staff meetings. He should take advice from not only his senior colleagues but even from the junior-most lecturers. They, too, should have a feeling of belongingness, of membership of the college community. But this is seldom done in our colleges and university departments. The following observation from the Report of the Kothari Commission (p. 327) is revealing :-

"In the governance of a university, the principle that good ideas often originate at the lower levels of the hierarchy must be recognised and respected. The tendency to attach importance to ideas and proposals merely because they emanate from persons who happen to hold important positions is unhealthy and particularly out of place in a university where they must be judged objectively and on their intrinsic merit. As Sir Eric Ashby has observed : "This principle of upward flow is vital to the efficient administration of a university and for the survival of autonomy and self-government..Not all professors consult their lecturers before decisions are taken as scrupulously as they themselves expect to be consulted by the lay governors in similar circumstances. As faculty boards become larger, there is a temptation for an oligarchy of senior professors to take over the responsibilities of governance on behalf of their more junior colleagues. That way danger lies, for any weakening of the principle of self-government within the academic body makes it harder to preserve self-government within the university as a whole and correspondingly harder to maintain the autonomy of the university in the modern democratic state."

Fifthly, he should try to decentralise his administration as much as possible and delegate authority and powers to suitable persons below him, retaining to himself supervision, policy-decision and consultation on important issues. It is impossible for any individual, however competent, experienced and knowledgeable he may be, to run the whole administrative machinery himself. If he tries to do it, it will create problems of low efficiency,

indifferent staff motivation and identification, low staff morale and even antagonism.

Within a university and a college each department should be its operational unit on the academic side. The Kothari Commission is of the view that even wider administrative and financial powers should be delegated to departments, which, in fact, constitute the main academic wings of a university. As the Commission has observed, "Each department should have a Committee of Management under the chairmanship of the head of the department consisting of all professors and some readers and lecturers elected by the staff. It should meet at least once a term to discuss the academic programme of the department, the requirements of laboratories and library, the delegation of duties and related matters, and its proceedings should be circulated to the Faculty and the Academic Council. It will be necessary to provide adequate secretarial assistance to each department for the purpose. In the case of large science departments, it may be advisable to appoint a deputy to the head of the department from amongst the professors or readers. He should be assigned specific functions by the head of the department with the approval of the University Executive Council."

Sixthly, he should have a more respectful attitude to his colleagues. Some principals or departmental heads treat their staff members—especially the junior ones roughly. They load them with all sorts of duties. They demand dumb obedience. They will not even permit them to use the stationery—even the letter pad of the department. If it is necessary that every teacher is treated as equal, there should not be casteism and differential treatment among teachers. The dictum that one who speaks louder is heard more should not happen in college and university administration. Even one who speaks little and only occasionally, should be listened to and his ideas, suggestions, etc. should be considered according to their merits.

Seventhly, he should derive his strength not from his status-leadership but from his educational or instructional leadership. Thus he should do -

—by holding weekly or fortnightly meet of the staff to read some paper, hold discussion on a current issue, to report some research done by a member of a staff, to report the recommendations of some seminar that a staff member may

have participated in; a talk on one's experiences after a visit of an institution, department and even of a foreign country;

- by organising periodically seminars or group discussions with a view to developing better clarity and depth in knowledge or skill in the use of new techniques and methods of teaching as well as of evaluation;
- by building up in staff members confidence and a kind of skill in them for greater and effective use of audio-visual materials and aids in class teaching;
- by helping them to develop a wholesome attitude to their work, to students and to the institution and the profession as well;
- by building in them a sensitivity to and ability in improving the prescribed syllabi by preparing annual plans of teaching and testing;
- by developing in them an understanding of the place of evaluation in the teaching-learning process and helping them to build up reasonable skills in preparing different kinds of evaluation tools, in summarising evaluation results and planning remedial work for weak students.

The supervision of the principal or the head should be helpful and constructive. He should be an adviser, guide, consultant, co-worker and the helper of the teacher.

RULES AND HUMAN RELATIONS

For the functioning of any organization meticulous implementation of rules is necessary. A college has also a number of rules and regulations, some of them are developed by the college itself and some are laid down by the university as conditions of affiliation. Every college administrator has got to observe these rules and regulations for smooth and effective functioning of the institution. A conflict may occasionally arise in implementing college rules, and apparently human relations may be ruptured. But human skills should come to the rescue of the college administrator.

- A college principal can rightly expect his staff members to attend their college duties regularly, but to insult them or scold them harshly for their lapse is not good administration and good human relations. One can improve such undesirable

practices through kind words, readiness to understand the difficulties of the defaulting teachers and through the establishment of a rapport with them.

- A college principal can have a fixed time schedule to see the visitors, but to refuse to see a guardian or a student who has some vital matters to discuss with him, because he or she has come without appointment is a high brow bureaucratic behaviour and hence bad administration.
- A college principal is legitimate in his rights to talk firmly to a guardian or a student or even to his colleague who makes unscrupulous demands on the college or uses ungentlemanly language. But still he can improve the situation by playing cool to the exasperated visitor by giving him patient, sympathetic and cheerful hearing and handling him psychologically. A smiling face and assured consideration of the sentiments and views of the others would win him friends, or at least prevent some one from becoming a bitter enemy of him and the institution.

PRE-REQUISITES TO THE DEVELOPMENT OF HUMAN SKILLS

While it is clear that a college administrator of today should consciously and constantly work towards developing human skills, there are certain pre-requisites which he should try to accomplish if he desires quick and effective success to his endeavours. Faith in good human relations is a matter of the basic attitude or the value system of an individual. This faith he should constantly try to reflect in his words and actions. I know of a college administrator who never misses an opportunity to talk eloquently about democratic administration and decentralization of powers in his college. But his actions always belie his pretention. He is the most undemocratic while professing to be democratic. It is not enough to talk of human relations, democratic way of life, but one should provide ample evidence of this good belief in dealing with colleagues, students and the local community. The regard for others, good will for others and respect for the individuality of others should be operational and not merely conceptual. Good human relation is applied good will, respect, consideration for others and allied inter-personal qualities. Good will for others is the pre-requisite for developing human skills. Respect and consideration for others are its adjunct. They should be communicated through facial expressions, hand and arm motions, and action-

patterns. A smiling face and courteous greetings help in creating good will.

Using others merely to further one's own interest does not create good will or mutual respect. A college administrator is a leader of the college community. He must try to give more to others than he hopes to receive from them.

Another pre-requisite is to strive constantly to build in good will all around. Some indifference or slip on one's part might undo, through a single incident, what one had built in over a period of time. A college administrator should, therefore, constantly try to build in faith in his staff for himself so that they would tend to co-operate with him fully and without any reservation.

HUMAN SKILLS FOR HUMAN RELATIONS

The dream of every college or university administrator should, therefore, be the development and possession of human skills. As his job is mostly interpersonal, he has to work constantly and closely with the management board, staff, students, guardians, local community and university officers, his human skills will have focus in ensuring pleasant and fruitful human relations. We can now define human relations in terms more meaningful and vital to the college administrators: "Human relation is a way of behaving or acting towards human beings in terms of ideals and value pattern of our democratic society." (Boykin) For our purpose—for the purpose of college administrators, we would say that human relation in college administration is mutual respect between the college and university administration and all others who are involved in the administration of the college, and good will for and faith in the dignity and worth of all these persons concerned with the institution. A college administrator, if he is to develop human relation skill, should know the motivation of human action, should perceive clearly his own role in the college and in the community, should develop skills in communication (more particularly in oral communication), should take a stock of power structure (especially principal of a private mofussil college) should know how to build up morale and maintain a high *esprit de corps* among the college staff, develop knowledge and skills of group dynamics, pick up skills in decision-making and build in qualities of leadership. If he achieves these essentials even with a moderate degree of success, he is well on the way of becoming an effective college administrator.

CONCLUSION

With the rapid expansion of higher education, the multiplication of university departments and colleges has become a natural phenomenon. Managements of newly established colleges do try to secure senior college or university teachers as the principal. But very often persons of high administrative acumen, of ability and of deep scholarships are not available to man the headship of the colleges. The management is then forced to recruit retired university heads or government college teachers or principals or even junior persons. Either they are the products of the old school of administration or they have no clear-cut understanding of the role of a college principal. They practise poor leadership, indifferent human relationship and take recourse to bureaucratic methods and authoritarian techniques. The result is disastrous for the institution, students and the staff. Unfortunately, the need for training or professional preparation for a college or a university administration is not recognised in India. But college and university administration will stand to gain if the principals and heads of the departments have some orientation in conceptual, technical and human skills which are vital for any administrator and public functionary. The heads of institutions of higher education should also realise the fact that they should now rest their oars not only upon status leadership, but also on their supervisory skills, planning acumen and human relationship. If this happens, we will have fewer student strikes and little eruption of student unrest in colleges and universities !

FINANCES OF UNIVERSITIES

INTRODUCTION

The most baffling and the most threatening problem confronting Indian universities and colleges today is that of finding funds for meeting the fast growing maintenance and development expenditure. In 1870-71 the universities and colleges in the country had cost to the government around 90 lakhs of rupees, which constituted 7.5 per cent of the total expenditure on education. In the course of a century, the expenditures on universities and colleges have run into several lakhs of rupees. In 1965-66, the total estimated expenditure in the States, including the union territories was about Rs. 1030 lakhs. Of these, the expenditure on the universities was 4.5 per cent, on Research Institutes 1.1 per cent, on Arts and Science Colleges 5.5 per cent, on Professional Colleges 5.8 per cent and on Special Education Colleges 0.3 per cent, the total percentage for the whole gamut of higher education being 17.2. Thus, the net expenditure on higher education has increased several folds and the percentage of higher education in the total educational expenditure has also increased; still the finances of universities and colleges are inadequate. The story of higher education in India is a story of strained finances, continued deficit budgets, over-drafts from banks and payment of high interests thereon, and the constant S. O. S. implorations to State Governments to come to their rescue.

In the first three Five-Year Plans, the expenditure on higher education had increased from Rs. 171.4 lakhs in 1950-51 to Rs. 1030.0 lakhs in 1965-66. However, in terms of percentage of total educational expenditure the increase is only to the size of 2.2 from 15.0 per cent in 1950-51 to 17.2 in 1965-66. The average annual rate of growth of expenditure for universities was 12.0, for Research Institutes 16.9, for Colleges of Arts and Science

10.7, for Colleges of Professional Education 15.1 and for Colleges of Special Education 14.7.

The indirect expenditure on higher education increased by 5.9 per cent, from 9.5 per cent in 1950-51 to 15.4 per cent in 1965-66. In 1950-51 the expenditure, both direct and indirect on School (Primary and Secondary) education was 75.5 per cent and of the higher education was 24.5, thus roughly in the proportion of 3:1. In 1965-66, the percentage of all expenditure on higher education was 32.6 per cent against 67.4 per cent on school education. Thus the proportion has improved, though slightly, in favour of higher education.

FINANCIAL DIFFICULTIES

However, universities and colleges all over the country are experiencing real financial difficulties. Some of them are even passing through financial crisis. Their difficulties stem mainly from the following facts :

- Their normal as well as developmental expenditures have increased by leaps and bounds within the last twenty-three years due to forces over which they have hardly any control.
- The expenditure of the teaching universities has gone up very steeply for obvious reasons.
- While the expenditures have multiplied by four or five times, the incomes have not increased proportionately.
- In the case of a number of universities, the income from endowments, instead of increasing or even remaining constant, has gone down. It has become extremely difficult for the new universities to raise any fresh endowments.
- The income from fees has increased, but not in proportion to the increase in expenditure. It cannot be further increased, as it is likely to add to the current student unrest.
- The U.G.C.'s grants are for post-graduate instruction, development and research and other specific schemes. But they are on a matching basis, requiring, as a condition, State Government meeting one-third of the non-recurring and one half of the recurring expenditures, and in certain cases, the entire recurring expenditure after the plan period. State Governments are usually hesitant and slow in accepting and then honouring their obligations.
- Though the U.G.C. has started aiding some private colleges, its aid, in proportion, is very insignificant.

—The Block Grants to universities, in most of the States, are fixed on the principle of meeting the deficit after deducting their income from all sources. But only the approved expenditures of universities are taken into account, and State Governments, have many clever devices to disapprove a number of items in the universities' expenditure which are reasonable from educational point of view.

The financial load on purely teaching universities is much heavier than is the case with partly teaching and partly affiliating universities. The load is more taxing in the case of State Universities than the Central Universities. A teaching university has to spend more on staff, as all the institutions on the campus are its own responsibility. It has also to spend more on buildings, library, laboratories, workshops, equipments, hostels, student welfare programmes and research. Even then, often the teaching universities are considered on the same basis as affiliating universities for the purpose of State Block Grants. This is rather unfortunate.

EXPENDITURE BY SOURCES OF INCOME

Universities and colleges are not profit-making institutions. They have to meet their expenditure from the income they derive. If the income falls short of the expenditure, a deficit results. In that case a university has to borrow money by way of taking a loan from the State Government or draw an over-draft from a bank. The interest on the loan or the bank over-draft is heavy and it adds further to the deficit.

There are five main sources of income for the State universities, e. g. maintenance grants from the State Government, developmental grants from the University Grants Commission, the income from all the categories of fees, the income from endowments, donations and gifts and from other sources.

A study of direct expenditure on universities and colleges by sources for the last 10 years reveals the following trend. About 50 to 55 per cent of money for expenditure come from Government funds, which include grants from the State Government and from the U.G.C. About 30 to 35 per cent comes from the income of all the categories of fees such as the tuition fees, examination fees, etc. About 3 to 4 per cents come from endowments and between 7 to 8 per cent come from 'other sources'. In the U.K., 70 per cent or more of university expenditure is met (on a quinquennial basis) from their University Grants Committee,

an agent of the Ministry of Education. The remainder is met from income from fees. But most of the students paying fees receive grants from the Local Authorities if they are under-graduates, or from the Central Government if they are post-graduates. Subscriptions from the Local Authorities, donations and endowment make up the remaining portion of the expenditure.

It will be interesting to study the expenditure on universities in different States as a percentage of their total educational expenditure. Such a study will reveal the real attitude of the State Governments to the growth and development of higher education in their territories.

In 1961-62, the percentage of expenditure on universities ranged from 0.8 in the Tamil Nadu (Madras) to 12.9 in Andhra Pradesh, the average for all the 15 States being 3.8 per cent. In 1965-66, the range was from 0.9 in Tamil Nadu as well as in Kerala to 7.5 in Bihar, the average for all the States being 3.1. Thus, the trend is not favourable to universities.

In 1961-62, the percentage of expenditure in the 15 States on Arts and Science Colleges ranged from 2.3 in Kerala to 10.0 in Jammu and Kashmir. The average percentage in this case was 4.5. In 1965-66, these percentages ranged from 2.3 in Tamil Nadu to 10.6 in Jammu and Kashmir, with the average placed at 4.2. This also shows that expenditure on Arts and Science Colleges as a percentage of total expenditure was a little up-graded.

Colleges of Professional and Special Education are allotted by States a lower percentage in their total scheme of educational expenditure. In 1960-61, the percentage of this expenditure had a range of 4.3 from 0.1 per cent in Orissa to 4.4 per cent in Madhya Pradesh. After 5 years, in 1965-66, the position slightly improved to the extent of the following: the range was from 0.2 per cent in Bihar to 6.1 per cent in Punjab, the average being 2.1 per cent.

This analysis yields three significant conclusions : (i) The expenditure on higher education by States has somewhat decreased in terms of percentages in the Third Plan period, (ii) the State Governments have varying policy of grant-in-aid to universities, Arts and Science Colleges and Colleges of Professional and Special Education, and (iii) Arts and Science Colleges receive more percentage of funds than the colleges of professional and special education.

ANNUAL COST PER STUDENT

The average per capita cost in higher education is also a significant measure to suggest its quality of teaching, training and research. During the British Period, the annual cost per student at the end of the nineteenth century was Rs. 149.1 in Liberal Arts Colleges; *at the end of 1937 it was Rs. 262.3 and on the advent of independence in 1946-47 it was Rs. 280.9.*

In 1950-51, the average annual cost in Arts and Science Colleges was 231, which shows a decline in the position which existed at the advent of independence. In 1965-66, this per student cost in Arts and Science Colleges improved and rose to Rs. 328. In the case of the professional education, the increase in per student annual cost was more remarkable—it increased from Rs. 779 in 1950-51 to Rs. 1167 in 1965-66. In the Colleges of Special Education, the increase was slight—o Rs. 49, i. e. it increased from Rs. 301 in 1950-51 to Rs. 350 in 1965-66.

This annual cost per student in Indian universities and colleges is very moderate in comparison to the international situation. It is more than Rs. 5,000 in the U.S.A. and the U.K., the U.S.S.R. and Japan.

Some factors regarding the average annual cost at the undergraduate and the post-graduate stages deserve to be noticed. Actually, three crucial factors—the average annual salary per teacher, the average number of students and the percentage of non-teacher costs to teacher costs largely determine the average annual cost per student. The average annual salary per teacher has increased by Rs. 1304 from Rs. 2696 in 1950-51 to Rs. 4000 in 1965-66 at the under-graduate stage. The average number of students per teacher has not much changed—it has remained at 20. But the percentage of non-teacher cost to teacher cost has decreased from 73.7 per cent in 1950-51 to 63.8 per cent in 1965-66.

STATES' SPENDINGS ON HIGHER EDUCATION

Income from State grants is a crucial source for Indian universities and colleges. A State Government's grants to universities and colleges depend upon its general fiscal policy in education and its specific policy of priority and weightage for the different branches of education for support from the State funds.

States in India differ markedly in their spending on education as a percentage of their total expenditure on all heads. For instance States' percentage of educational expenditure to the budgeted expenditure ranged from 12.9 per cent in Jammu and Kashmir to 33.8 per cent in Kerala in 1961-62, the average for all the 15 States being 22 per cent. As many as nine States—Assam, Gujarat, Jammu and Kashmir, Maharashtra, Mysore, Orissa, Punjab, Uttar Pradesh and West Bengal were below the national average. In 1965-66, the range slightly changed from 16.4 per cent in Orissa to 33.9 per cent in Kerala; the national average was 21.0 per cent. The States of Assam, Gujarat, Jammu and Kashmir, Maharashtra, Orissa, Punjab, Uttar Pradesh and West Bengal again fell below the national average.

Some States like Andhra Pradesh, Bihar, Gujarat, Kerala, Maharashtra and Mysore spent more than 40 per cent of their educational budgets in 1965-66 on primary education and Andhra Pradesh, Jammu and Kashmir, Madhya Pradesh, Madras, Punjab, Rajasthan, Uttar Pradesh and West Bengal spent more than 20 per cent of their educational budgets on secondary education. This significantly affected their spending on higher education.

The crucial point is whether this kind of fiscal policy which gives priority to primary education over higher education is good, in the ultimate analysis, for the development of the national economy which is so much dependent upon the skilled manpower produced by higher education. One can understand that a welfare state places weightage and priorities in its budget for universal elementary education, which is the education of the masses. The policy was all right for the first Three Plans. But now almost 90 per cent enrolment has been attained in the age group of 6-11. Appreciable progress has also been achieved in the enrolment in the higher age group of 11 to 14 years. Is it possible to achieve 100 per cent enrolment in primary classes? Will not the enrolment improve itself as the time passes? Will it not do good to the country if the part of the funds that we now spend on universalising primary education is diverted for the improvement of higher education?

There are some thinkers in the country who believe that cent per cent success for compulsory primary education is not possible. The country should be satisfied by bringing 90 per cent primary children in schools, and in the Fourth Plan, it is worth while to

cut down a slice of funds from primary education and place it for the benefit of universities and colleges. This seems to us a more realistic policy.

STATES' BLOCK GRANTS

In India, education including university education and higher education is a State subject. This implies that the bulk of finances required by universities of a State for their normal expenditure should come from the grant-in-aid by the State.

For State Universities, there seem to prevail two principal patterns of State grants, viz., the deficit grant and the block grant. We illustrate this system taking the case of Gujarat. Gujarat, inheriting the practice of the triennial grants from the old bilingual Bombay State, has adopted the pattern of Block Grants for its universities. There is nothing wrong with the system of the Block Grants. The rub lies firstly in fixing the amount of the balance of expenditure after deducting all incomes and secondly in the disregard of the normal growth of expenditure of the universities during the period of the Block Grants. In the Gujarat State, for arriving at the amount of the first annual Block Grant for each of the State universities, the year 1961-62 was taken as the base year. The expenditure of each State university on all the then existing activities, excluding replacement of equipment and furniture, construction of buildings etc. and also excluding specific grants received from the State Government or the Government of India or the U. G. C. was considered for this purpose. Certain types of expenditure such as scholarships, etc. were also excluded. The income from all sources except grant and specific donations was taken into account and the block grants to the State universities were so fixed as to cover the balance of the admissible expenditure. Thus, the Block Grants of the Gujarat Government to the State universities are fixed for a period of three years and are based on the principle of meeting the deficit after deducting income from fees and other sources. The grants of all the three State universities vary. The grants continue to swell with the expanding normal expenditures of the universities, but they are found insufficient.

The pattern of Block Grants has not been working satisfactorily in most of the States. The fault lies perhaps with the attitude of the State Governments to the normal and developmental expenditures of the universities. Usually the State insists upon making a clear distinction between the State responsibilities for continuing

the normal activities of the universities and those for the developmental schemes. And there is nothing wrong in this. The difficulty arises when the State Government refuses to recognise certain expenditures on normal activities as reasonable. Governments' own perception of 'reasonable expenditure' and 'normal activities' clashes with those of the university administrators. The universities have to be responsive to the continuously growing demands of the society for about a variety of instructional, training and research programmes, which for them become normal activities but the State is often inclined to view such activities as extravagant. The State also makes funds available on approved developmental schemes which are selected again on merits and the finance is provided for them to the extent possible after meeting all its obligations for elementary and secondary education.

There has been some thinking on the part of many State Governments that the universities in their regions should economise their expenditure on administration and that the entire expenditure on it should be met from the savings or income from other sources. "The administration of a university is run for the benefits of students and normally it should be possible to see that students contribute suitably in the form of various fees to cover the expenditure on administration". This thinking that students should contribute more towards university expenditure is not consistent with the recent thinking on equalization of educational opportunity. The Kothari Commission has recommended gradual reduction of financial burden on students for all education including university education.

The State Governments also seem to be of the opinion that the universities are not charging reasonable fees for their various examinations. It is definitely against charging uniform fees for all examinations. The Gujarat Review Committee on Grants for Universities (1962) was definitely of the view that the State universities "should consider steps for further enhancing their income from examination fees". This again is contrary to the recent thinking which regards abolition of all fees in higher education as the ultimate goal of the educational policy.

On several other scores also, the thinking of the various State Governments needs modernization. For instance, the Gujarat Government feels that universities have failed in raising the rate of tuition fees at the under-graduate and post-graduate levels,

post-graduate centres of affiliating universities should not be fully financed by the universities but bear legitimately the expenditure of affiliated colleges; universities do not sufficiently exert themselves to try to secure endowments and donations from industrial and commercial concerns particularly when a number of new industries are coming up and commerce and trade are growing in the State at a rapid pace; most of the activities pertaining to students' health and welfare activities should be transferred to affiliated colleges and the expenditure on such a programme should be incurred by them and not necessarily by the parent university; the expenditure on scholarships incurred by university should not be considered admissible for government grants but the universities should pay these scholarships out of such endowments and donations as they may have received or out of their own resources; the hostel fees be so arranged that, on the average, the income from fees will meet the total expenditure including interest, depreciation and repairs and the university presses should be run on a commercial basis.

Such seems to be the thinking of the State Governments today on certain items of university expenditure. This thinking is more bureaucratic and official rather than educational. It would need complete review in the light of the recent principles of the financing of higher education and the policy suggested by the Kothari Commission. As it is, it is too conservative and retrograde.

Again, the payment of instalments of grants should be so arranged that the universities should not experience any difficulty in meeting their normal expenditure. It is also desirable that when the Financial Commission makes their quinquennial allocations to the State, they should specially earmark the funds for university education, so that the State Government may not drain it off in other sectors.

The following broad suggestions, if implemented would considerably improve the financing of higher education by State Governments.

—A proper base for the Block Grant to be paid to the State universities should be fixed by each State Government as the base of the Grant.

—To this basic grant be added annually an amount, equal to 6 to 7 per cent of the previous year's grant for the normal increase in the university's expenditure.

- Increase in the university's expenditure on account of higher cost of living or other reasons viz., increase in dearness allowance, house rent, compensatory allowances, increase in pay scale etc., should be added to the Block Grant.
- The expenditure on new posts, new departments and new schemes of development (outside the scope of the U.G.C.) undertaken by the universities with the approval of the State Government, should be considered for additional grant at 100 per cent.
- Matching grants commitment by the State on recurring expenditure on any scheme of development sanctioned by the U.G.C. should be honoured by the State during the Plan period and be prepared to bear the full expenditure on each scheme after the Plan period. This expenditure should be added to annual Block Grants thereafter every year, till the schemes remain in operation.
- The State Government should also provide for depreciation grants to the universities for buildings, machinery, equipments, etc.
- Interest free loan should also be available to universities for certain specific programmes, such as, construction of hostels for students, staff quarters, etc.

This is so far as the State Governments' responsibility for finding money for higher education is concerned. The universities, too, have to fulfil their obligations by endeavouring to enhance their revenues from sources other than the Governments' Block Grants. They should try to raise funds from alumni or past students, request the local bodies, industrialists and business concerns to support expenditure on certain courses of training and projects of research, and even call upon the public at large to give a hand in meeting the cost of a service which is intended for them and for their sons and daughters.

THE U.G.C. GRANTS

The grant from the University Grants Commission is an equally vital source of revenue for Indian universities for their developmental programmes. These grants are mainly for post-graduate instruction and research and other specific schemes. There should be no doubt that the U.G.C.'s assistance has contributed tremendously to the development and enrichment of the programmes of the universities, but the conditions that the U.G.C. grants carry have also created difficulties for them. The grants from the

U.G.C. are normally available to the State universities on the understanding that the State Government or the university itself will bear one third of the non-recurring and half of the recurring expenditures, and in the latter case the State Government or the University has to agree to bear the full cost of the aided schemes after the five years. These two conditions have proved to be the major obstacles to the universities to be able to derive maximum benefits from the U.G.C. grants. There should be reap-proachment both from the side of the State Government, which should be prepared to bear its share beyond the period of the particular Plan period during which the grants are made; and also from the side of the U.G.C. on the following lines :

- The U.G.C. should pay 50 per cent of the recurring expenditure for the development of post-graduate education and research of a permanent nature as Block Recurring Grants to universities.
- It should also pay half the cost of the approved, specific schemes of research of a temporary nature. The recurring grants may be fixed after proper scrutiny for a definite period, say five years, after which the grants may be reviewed.
- The Commission may consider new schemes of development in the light of the funds at its disposal for recurring grants, but once the schemes are approved, the grants should be continued.
- There should be annual evaluation by the committee of experts of all the schemes thus aided by the U.G.C. For the purpose of such comprehensive evaluation, definite evaluative criteria should be developed. It should be open to the U.G.C. to withdraw its assistance on any scheme which is not functioning satisfactorily.

These are some of the ways in which the present difficulties experienced by universities in regard to the U.G.C. grants can be considerably minimised.

CONCLUSION

The fiscal policy of the State Governments on higher education needs to be liberalised. Universities are, from a financial point, the responsibility of the State Government. This responsibility they should squarely face without unduly trying to find loop-holes in

the spendings by the universities. A State has to find money for elementary and secondary education, but this should not throw the State on defensive and indulge into retrograde thinking and practices. The miserly treatment meted out by each State to the demands of its universities for funds, the arguments usually advanced by it for economy and reduction, the grumbling attitude, the talks of throwing increasing burdens on students who are the main beneficiaries from universities, the delays made in paying the agreed matching grants, the reluctance in approving the developing schemes under the cover of 'merits' frequently deployed by it and in turning down schemes which even the U.G.C. is prepared to support—these are some of the disturbing features of the fiscal policy of the State Governments in India on higher education. Some modern and fresh thinking on a welfare state's obligations for the development of higher education needs to be brought to bear on the educational policy of the State Governments. The thinking in State Secretariat would need to be considerably adjusted to the philosophy, principles and programmes of higher education recently outlined by the Kothari Education Commission. What is needed is a rational shift in the policy of financing higher education in each State !

UNIVERSITY AUTONOMY—A MYTH OR A REALITY

AUTONOMY—A BASIC CONDITION FOR UNIVERSITY DEVELOPMENT

A university cannot flourish on any other condition but *autonomy*. It is only in a free academic atmosphere that the finest and the most fruitful interaction between university teachers and students, between university administrators and teachers and between teachers and community can take place. Such interaction, group dynamism and fearless dialogue are vital for realizing the aims of the university, viz, extension of the frontiers of knowledge, achieving the all round growth of students and meeting the cultural and technological needs of a developing society. This is no platitude; it is the basic condition for developing our universities into the first rate centres of higher learning, training and research.

UNIVERSITY AUTONOMY FROM THE DAYS OF ANCIENT INDIAN UNIVERSITIES TO THE PRESENT ONES

For India, the concept of university autonomy is not new. It is not a gift of the modern times. The ancient universities of India—the Taksashila, Nalanda, Vikramshila and Vallabhi—enjoyed autonomy in the real sense of the term. Richly endowed by kings, merchant princes and other affluent members of the society, these universities achieved some splendid things chiefly because the administrators, teachers and students had the highest autonomy within and without. Control of the universities by the State came about only during the British administration. The internal and external control, however, became more pronounced and exacting at the turn of this century during the regime of Lord Curzon. He claimed to have done this as a measure of raising the quality of university education and of streamlining the university administration in the

interest of maintaining standards. The resources allowed to the universities were extremely meagre and their power to manage their affairs was severely circumscribed. The organization and administration of the universities were usually dominated by the Government or other non-academic elements. But things seem to have improved in this respect after the attainment of independence. A new trend towards a more broad-based and flexible university constitution and a more liberal policy of the State towards universities have been in evidence. In the last few years the question of university autonomy has been brought into sharp focus owing to certain disturbing events that took place in universities in some States. Now, not only the concept of a university is clearly spelt out but it is enlarged so as to include autonomy within the university, autonomy within the university system itself and the autonomy of the university system as a whole in relation to outside agencies. The answer to the question whether university autonomy at present is a myth or a reality should take cognizance of all these three dimensions. It should also take into account the clear distinction between university autonomy and the freedom of university teachers. There is no lack of consensus on the academic freedom of the university or college teacher "to speak and write about and participate in debates on significant national and international issues" and to pursue and publish his studies and research. The areas of conflict are more administrative and they lie in the domain of university autonomy. Let us briefly consider some of these areas of conflict and see if an answer to the question whether university autonomy is a myth or a reality in India to-day can be found.

GOVERNING BODIES OF UNIVERSITIES

It is, sometimes, argued that in the conduct of university affairs, the voice of the teachers should count most; the non-academic should have either no place on governing bodies like the Syndicate or if their representation is deemed necessary, they should not be in a majority. To argue that the lay-element should have no place on the decision-making bodies of a university is to take an extreme position. The representation of the lay or non-teacher elements on the Syndicate and the Senate is justified on several counts including that of the close relationship existing between the university and the society. Conflict arises when personal or extraneous considerations rather than the good of the university

guide the course of action of some members of these bodies. It is well known that such cases are not confined to non-academic elements only; they are equally often found among teacher representatives. Persons with a certain tone of personality, and intelligence try to dominate others. This makes internal autonomy difficult. There is no easy way to eliminate the possibility of such conflicts. It is difficult to preach to the members the virtue of loyalty to self-denial and the good of the university and all it stands for. One possible way of improving the situation is to clearly spell out the functions of the non-academic element which should be, as articulated by the Kothari Education Commission, "mainly to represent to the academics the wider interests of the society as a whole, but not to impose upon them." There is a need to preserve a balance between the proportion of the teachers and non-teacher representatives on the governing bodies and as suggested again by the Kothari Commission, to develop in the university governing bodies such conventions as would help largely to shift the centre of gravity of authority to the academic wing of the university government and vesting in the Academic Council, or where no such body exists, in the Faculties and Councils of Post-Graduate Instruction and Research, the final authority in all academic matters. There is some difficulty here. Sometimes the assembly of the most learned scholars and philosophers makes deliberations less effective and in such situations the non-teacher elements or non-academic experts succeed in bringing discussions and decisions in a truer perspective. There is also another fact which needs to be borne in mind. The Indian intellectual community is not yet an autonomous and self-sustaining community. Therefore, it is better to have an effective admixture of the lay and academic elements on the governing bodies of the universities. The proportion of this admixture cannot be decided by any rule of thumb—it is to be arrived at, on the basis of the past experience of each university. It would be better to have the composition of the governing bodies, especially of the Senate, prescribed in statutes than laid down in the Act. Only then the membership can be modified when a change is deemed necessary.

ACADEMIC COUNCIL AND FACULTIES

In Indian universities even in academic matters, there seems to be in operation a kind of power structure. At the top level of this hierarchy stands the Academic Council and, at the lowest

level is the university department. In between are the Faculties and Boards of Studies. In the departments of colleges or institutions senior teacher takes over the function of decision-making, and, therefore, even in the Board of Studies and Faculty their views and opinions carry the day. As the Kothari Commission has stated, the principle that good ideas often originate at the lower levels of the hierarchy must be recognised and followed. As a corollary to this, Faculties should ordinarily respect and endorse unanimous decisions of Boards of Studies, the Academic Council should do the same in the case of resolutions of the Faculties and the Syndicate those of the Faculties.

There is now a strong advocacy for every university to have an Academic Council. While many things can be said in favour of this stand, its possible danger to the autonomy of Faculties may also be pointed out. The Academic Council is a large body with representation of different disciplines. Now, in a large body, it is the common experience of many that it is not always easy to get educational innovations and experimentations endorsed, because of the natural possibility of divergent view-points of members who themselves may be on different points on a scale of progressivism to conservatism. Conventions should, therefore, be developed so that a Faculty or an Institution may not be hampered by the majority vote in the Council to undertake worthwhile innovations and experiments in teaching methods or evaluation procedures. A Faculty or a constituent institution should have freedom to try out new ideas or practices. Such a freedom is basic for the success of university autonomy.

UNIVERSITY DEPARTMENTS AS OPERATIONAL UNITS

Another essential reform is to make different departments of universities strong operational units. The Kothari Commission, too, has favoured the delegation of wider administrative and financial powers. Every department in a Faculty or a university institution should have freedom to develop itself on the best possible lines. The Dean should function as a co-ordinating officer and respect the autonomy of the heads and teachers of each department of his Faculty as he himself would expect his autonomy to be respected by the superior officers and the governing bodies.

JOINT COMMITTEES OF TEACHERS AND STUDENTS

One source of threat to the autonomy within the university is the polarisation taking place between teachers and students of

an institution on one hand and the administrators on the other. There is considerable force in the recommendation of the Kothari Commission to establish joint committees of teachers and students in each institution to serve as forum of discussion. There should be greater interaction and a livelier dialogue among the students, teachers and administrators.

VICE-CHANCELLOR'S AUTONOMY

There is something like Vice-Chancellor's autonomy, too. It is true that in a democratic constitution a Vice-Chancellor is bound by the majority opinion in the Syndicate. Ordinarily, he follows the advice of the Syndicate as reflected in their unanimous or majority vote on items of its agenda. But there may be some issues, which, to his mind, have a profound significance for better academic life or the advancement of the university. Such a question may pertain to some bold academic innovation like correspondence courses of studies, semester system and grade and credit system, evaluation procedures, research or university extension programme. It is likely that the Syndicate may have some reservations on the innovations or may want to refer them back to the Academic Council or to the Faculty. In such circumstances, if the Vice-Chancellor is convinced that the matter is in the best interests of the university and the development of higher education in the State or in the country, he should be free to endorse the innovation despite the reservations of the Syndicate. (Of course in well organised universities occasions for such differences between the Vice-Chancellor and the Syndicate are likely to be very rare.) But, the point is that the Vice-Chancellor being the academic and administrative head of the university, should be free to take a stand which is in the highest interests of the academic life of the university. The fear that such a freedom vested in the Vice-Chancellor may be abused can be minimised by providing that the Vice-Chancellor would approach, in such extra-ordinary cases, the Senate or the joint meetings of the Faculties to justify his stand.

UNIVERSITY AUTONOMY AND STATE GOVERNMENT

An eminent American educator had said some forty years ago that "the supreme test of fitness for having a university is whether the people of the State will on the one hand tax themselves to support the State University and on the other hand impose upon themselves a self-denying ordinance to leave it severely alone, so that

it may select its own members by the application of its own intellectual standards and the members thus chosen may be absolutely free to investigate, to teach and to publish whatever they believe to be the truth. And if our people do not already possess this conception of a university, they may be educated into it, for a university cannot flourish on any other condition." These wise words uttered almost half a century ago sum up admirably the position of university autonomy in relation to the State Government.

State interference with the autonomy of a university takes many forms. Retired politicians and public servants are appointed by the State to Vice-Chancellorship. As Shri M. C. Setalwad pointed out in a Convocation Address at the Banaras Hindu University some time ago, nothing can be more destructive of academic standards than this kind of Government interference with university affairs. The State Government may modify the Acts of the State Universities in such a way that their internal autonomy is not adversely affected. The State Government may grant affiliation to a private college despite the adverse recommendations of the university governing bodies. In some States, universities are also given directives or instructions as to where centres of post-graduate instruction or Faculties should be located, what courses of studies are to be introduced, how research is to be structured and processed (so as to lend support to the State educational policy), or what policy is to be followed by them. In the Amendment of Acts of some State universities, members of the State legislatures are given representation on university Syndicates and that, too, on a communal basis. Some times profuse assurances are vouchsafed by State Government that its instructions to universities, as and when they are issued, would be strictly limited to cases "in which a university acts, or is prone to act, in a manner detrimental to or in opposition to a public policy accepted by the Legislature and that they would be promulgated only after consultation with the university concerned." They may mean something or may mean nothing. If the power of issuing instructions to State Universities or of deciding finally the affiliation of private colleges is vested in the State Government in the university Act, it would operate like a Damocles' sword which may descend on their heads any time. It is, therefore, desirable to have a statutory provision in the University Act itself defining the limited scope of the exercise of State Government's authority.

But this does not mean that *Government intervention in university affairs is necessarily undesirable*. There are cases on records when Syndicates of certain universities have created overnight "a hundred posts of Readers and promoted lecturers to these posts without calling for applications by public advertisement". Sometime back the affairs of the Banaras University and recently those of the Bhagalpur University were found to be in grievous disarray. The Kothari Commission and the Model Act Committee have suggested that no academic statute need to be sent to Government for approval. But when such statutes involve or affect State finances, it is only reasonable that the State should be given an opportunity to weigh their financial side and if necessary, refer them back to the Senate with its recommendations. Again, as Shri S. R. Das had stated in his minute of dissent to the Report of the Model Act Committee a distinction should be made between academic and non-academic functions of a university and that in the former there should be no external interference while in the latter the non-academic element, which will necessarily include the State, should be permitted adequate say.

What has been stated so far would mean that a State Government has an obligation to the electorates to see that university functions efficiently and serves the best interests of the society. But it should help rather than hinder, the university to grow into a strong centre of higher learning and research. To make university autonomy a reality, a university on its own part, should also realise that (to quote the Kothari Commission), "autonomy is not a matter of fundamental right as it were (but) is a condition of its efficient functioning and for enabling it to achieve true ideals and aims of a university". The State Governments, too, should approach the problems of their State universities with an enlightened understanding of the needs of a developing society in higher learning and in research, and in a spirit of helpfulness they should do nothing that would appear to be or act as a restriction on university autonomy. Only then, can University autonomy become a reality.

UNIVERSITY AUTONOMY IN RELATION TO OUTSIDE AGENCIES

This is an important dimension of university autonomy. It should be viewed in the perspective of the obligations and responsibility that universities have to the society and the nation and even to mankind as a whole. These inherent obligations may in a

way restrict the absolute or isolated internal university autonomy. Decisions on matters like standards of instruction and evaluation, admission policy, the provision and further development of the training programme, organisation of research work, and such other questions are of course matters affecting the internal autonomy of a university, but as the Kothari Commission has rightly observed, they cannot be taken "in isolation from the economic and social needs of the country"...Such decisions are national decisions and no university can act contrary to them. This means that the conduct of all university affairs cannot be the sole concern of the academics; some of them have definite social dimensions and would require an adjustment of the academic aspect to social or national needs.

This is all very well as far as it goes. There is no dispute about cases which are clear and straightforward. But there are certain issues which are closely linked up with social needs or even national unity, and may often be controversial. It is desirable that decisions on issues that are controversial are left to the universities. Government at best may spell out various implications of national significance and their possible impact on improvement of educational standards. But the final decisions are better left to the universities. Let us take, for instance, the question of putting the admissions in universities in the context of the manpower needs of the nation or the question of the medium of instruction as a national policy. The Kothari Commission feels that admission to universities should be regulated and they be done on a selective basis. This is a controversial point and a complex one, too, in the context of the explosion in enrolment at the elementary and secondary stages and a mounting hunger for higher education in all sections of the society including those who were deprived of the benefit of higher learning for centuries. In many cases, higher education acts as a social and economic lever. It would become very difficult to shut the door of a university to the clamouring resurgent crowd of aspiring students. Again, the Kothari Commission's suggestion to make admissions on a selective basis at the higher secondary and university stage takes a number of things for granted, the most vital of which is well-articulated and well-implemented planning. Admission on a selective basis would suit only those completely planned economies where planning is highly centralised and where even higher education is a Central subject. The Indian educational system as well as its planned economy operates in a different manner. Again, equipping persons.

with the necessary know-how and vocational skills is not the sole, though very vital, objective. As the late President, Dr. Zakir Hussein had said, the creation of a 'polity of responsible citizen and a society of well-educated and cultured persons is among the important functions of education. One has, therefore, a feeling that the introduction of selective admissions in all universities would perhaps tend to aggravate the already disturbing inequality of educational opportunity and would add to the frustrations of the adolescents. Decisions on controversial issues of policy should be better left to individual universities.

The other illustration is related to the medium of instruction. It has become a highly controversial and a very explosive issue. As we have said earlier, decisions on such controversial issues be better left to the universities themselves. However desirable it may be to switch over to regional languages as media of university education, the decision cannot be forced on a university on any ground. Universities have a right to decide the issue, and the question of deciding the manner and of setting the pace to the switch-over should be left to the universities. If decisions are forced on individual universities, university autonomy will be a myth.

CONCLUSION

Autonomy for the University is vital. It is the basic condition for the existence of a university. The price of autonomy is eternal vigilance by all parties concerned. It is no gift from above. It has to be built up and justified on the basis of intellectual integrity and devotion to duty. University autonomy is a reality in some universities to a large extent, in a few universities to some extent, but a myth in some others.

We conclude this brief note with a just appraisal of the current situation by the Kothari Commission : "The Universities are established by law and they can have only as much autonomy as the law permits. In the last analysis, therefore, the real custodian of university autonomy is public opinion based on a conviction that autonomous universities, which maintain intellectual integrity in their fearless pursuit of truth, are indispensable bulwark of democracy and freedom". In making university autonomy a reality, a strong public opinion should be created. And here the university teachers' bodies, the U. G. C., the Inter-Universities Board and the intelligentsia have a vigilant role to play.

NEED FOR SETTING UP MAJOR GOALS: REFORM OF UNIVERSITY CONSTITUTION

The Ahmedabad Seminar on the Reorganization of the Administrative Machinery of the University held in 1969 is another evidence of the fact that the interest in renovating constitutions of universities is growing.

In the Baroda University, the Vice-Chancellor had appointed a Committee to go into the question of the Amendment of the Baroda University Act which was passed in 1949.

The Rajasthan University, too, is reported to have set up a Committee under the chairmanship of its former Vice-Chancellor, Dr. M. S. Mehta, for reforming the university governance.

The Gujarat Government has appointed the Dongerkery Committee to review all the University Acts in the State and to consider their amendments where deemed necessary.

This is understandable, and it is good. A period of two decades is a reasonable time to look at the functioning of any university constitution, locate the major defects, plug the loop holes and modernise its statutory bodies and their functions in the light of the changing functions of universities in a fast growing new India.

SIX MAJOR ISSUES

The six major issues that figured prominently at the Ahmedabad Seminar and in debates on university constitutions at other places are : appointment of Vice-Chancellor, constitution of Senates and Syndicates, the powers of Academic Councils, the size of the nominated members on the Senate, the proportion of the teacher and non-teacher elements on the Senate and the Syndicate, and autonomy of the university in relation to the State Government. These are indeed the crucial issues. And it is on these issues that very

little unanimity of views prevails at present. The conflict on these issues is going on and this conflict is likely to make the task of reforming and modernising university constitutions difficult. It is delaying the reform that is over-due.

POSITIVE ATTITUDE

The debate on what is good and what is not good in respect of each of these six crucial issues is not easy to be settled. The debate is likely to go on endlessly. University teachers, administrators, non-teacher elements on university governing bodies, State Government, and political parties hold even conflicting views on these issues. Each of them is likely to be right and each of them is also likely to be wrong on some points. The reform in any university's constitution will not be achieved by magnifying differences in views, or generating heat and taking up uncompromising stands. The need of the day is to take up a co-operative and sympathetic stand, to understand the view-points of different oppositions; and to adopt a positive attitude with a firm commitment to a give-and-take policy. The goal should be to discover elements of common agreement and accord. It is better to endeavour "to agree" rather than to accentuate disagreement and gaps in thinking. The clash of minds in an intelligent way is always fruitful; but battles never solve any problems.

MAJOR GOALS

Instead of directing major efforts towards debating different aspects of the six major issues, it is better to set up major goals of reforming university constitutions. Seminars, symposia and conferences should now deliberate on the main nature and directions of change in university governance, such as :

- Determination of desirable but practicable functions of a modern university in the context of the needs of a developing society.
- Reforming those Sections of the University Acts that have been found defective in actual functioning over a period of time.
- Addition of new features which the changing functions of a modern university demand.
- Agreement on the type and extent of the university autonomy desired.
- Deciding the best ways to harmonise the representation of the teacher and non-teacher elements on the Senates and Syndicates.

- Streamlining of the functioning of Academic Councils and other bodies of the university from the point of upgrading university standards.
- Firm provision for an upward flow of ideas from junior teachers to the heads of departments; from departments to the principal, from institution to the university administration.
- Provision of student association in the process of university decision-making on the lines of the Joint Statement of the British University Vice-Chancellors and National Union of Students.

If such major goals can be worked out co-operatively with an open mind and with an attitude of give-and-take in Seminars and Meetings, it will be easier to plan concretely for renovating the old structures of university constitutions.

What is now needed is not mere debates, but greater dialogues and more concrete and tangible proposals for reconstructing university administrative machinery. A climate of understanding, adjustment, and give-and-take would achieve more in this respect than hostile debates and uncompromising extreme stands.

MODES OF ELECTION TO UNIVERSITY GOVERNING BODIES

INTRODUCTION

What should be the mode and method of election of the various governing bodies of a university ? Two systems are in operation in Indian universities; one is election by simple majority called the Single Distributive System and the other is by means of a single transferable vote by ballot called the Proportional Representation System.

A controversy on the relative merits of these two systems has recently arisen, because in the Amendment of some University Acts attempts are made to replace the simple majority voting system by the more intricate and complex system of the proportional representation by means of a single transferable vote by the ballot. For instance, this issue had come in March 1969 for a very hot debate at the Baroda University Senate Session on the proposals for amending its Act. This fact deserves to be mentioned because it is a rare occasion for an Indian university that the mode of election to its bodies is discussed by its Senates. This is an issue on which even the experts are silent. The Radhakrishnan University Commission, the Kothari Education Commission, the Inter-University Board and the Vice-Chancellors' periodical conferences are almost silent on this question.

It is interesting to go into the relative merits of both the systems, and consider which system would be more suitable to Indian universities in the present situation and on academic considerations.

THE SINGLE DISTRIBUTIVE VOTE

A better and simpler expression for this system is 'election by simple majority vote'. There seems to be some disagreement

among the theorists of the political science regarding the connotation of the term 'single distributive vote'. According to them, the basic principle is that votes cannot be distributed—they can at the best be transferred. Therefore, the expression 'simple majority vote' is to be preferred to 'the single distributive vote'.

The chief merit of the election system by the simple majority vote is its simplicity. This system is more suitable to elections in educational bodies where parties or groupism should not be reflected or created, and which should be simple and straightforward so that all the voters understand the significance and importance of their votes. It is also considered more psychological than the other one. An expert like Henry D. Mayo who, in his book '*Introduction to Democratic Theories*' has criticised adversely the system of proportional representation by single transferable vote. Earnest Parker has arrived at a similar conclusion against the proportional representation system. The implication is that the simple majority vote is very easy to operate, is always more meaningful to voters and is more suitable to elections to educational bodies like the Senate and the Syndicate.

But this system is criticised by some as being unscientific and not fair to the voter. It is alleged that in this system votes are likely to be wasted, and if the system does not give satisfaction to all the voters, it can pave a way to groupism which is detrimental to academic institution.

PROPORTIONAL REPRESENTATION

In this system, the quota of vote is first decided. For instance, if a constituency consists of total 50 votes and if two seats are provided for that constituency, the quota of votes will be 50 divided by 2 plus 1, (i. e. 3) i. e. 17. If one is to get oneself elected, the minimum number of votes that one should poll will be 17. This is the quota of votes. Whatever more votes that the first winner would poll will be transferred to the next best candidate. One who gets the lowest number of votes will have the votes cast in his favour transferred to the one who has polled votes which is nearest to the quota.

Thus, this system is called proportional representation by transferable vote, because votes are proportionally transferred in order of preference of the voters.

It is claimed that this system should be adopted in all elections conducted in the university because it is more objective and

scientific. Certain justifications are also put forward for this System. For instance, it is held that this is the type of voting system adopted in all commonwealth countries; there is an Act passed by the Parliament that voting should be by a single transferable vote; and this is the type of voting also followed by most of the western countries and the leading universities in India and abroad.

It is further maintained that, in this System, not a single vote is wasted; these voting procedures guard against party factions; no one particular group would be returned in a way that would give it an opportunity to dominate over other groups; and thus, there will be no chance for any group monopoly.

Whenever a smaller body is to be carved out from a larger body, the accepted mode of election is, by proportional representation by single transferable vote; all shades of opinions prevailing in the higher body are reflected in the smaller body.

A contention is also made that this mode of election gives the representative character to the two bodies and prevents groupism detrimental to an academic institute.

The real merit of the system is, as said earlier, that here nobody's vote is wasted; a voter who has to exercise his franchise does it with a surety that he does not lose his vote; every voter gets satisfaction.

CONCLUSION

The Baroda University Senate rejected this system of proportional representation by transferable vote by a huge majority when it came before it in the form of an amendment in its March Session of 1969 and favoured the system of simple majority vote.

The Proportional Representation system was objected to on psychological grounds, because one who cast one's votes by preference might not like to have his votes transferred to the next best candidate who might not be of his choice; thus, it also becomes undemocratic, in the sense that the advantage of one's vote is given to another candidate to whom he might be even opposed. Whereas the Proportional Preference System is too complicated and time-consuming, the System of the Simple Majority Vote is very simple. What one system may be considered good for election to political bodies may not be good for election to academic bodies. The objectives of election in the case of political institutions

and educational bodies are very much different. And so, the Systems should not be mixed up on identical considerations.

In the case of university bodies like the Senate, the Syndicate and the Academic Council, the very idea of 'parties' and 'minority group' should be repugnant.

In this connection, it should be noted that the System is bound to result in lowering down the moral tone of the composition of the most important and vital authority of our universities to a group of people not looking to things eye to eye with one another, but with entirely different and very varied motives.

It is claimed that because in other universities of the country, this System has been in operation, the System should also be adopted in each and every university when its Act comes to be adopted or amended. But most of the universities in India are of the affiliating type. A system which may be all right for ensuring the representation of voters of different shades of opinion and conviction spread over a large area in an affiliating university may not work satisfactorily in a teaching and residential university. In universities, a kind of homogeneity should prevail which is very precious and has to be preserved at any cost.

Again, in every university, the ideal should be that every sort of difference in opinion is resolved, by established tradition, by sitting around the table.

It is likely that the adoption of the System of the Proportional Representation on transferable vote may amount to not only creating and encouraging groupism in university bodies but may immortalise them by putting the System on a Statute Book.

The nature and objectives of political and educational institutions are different. It will be a counsel of dismay if the system of Proportional Representation on transferable vote, which is good for political institutions, is forced upon educational institutions where politics is to be denied an entrance, where homogeneity is to be ensured, and where a simpler and quicker method of election is to be adopted.

The Simple Majority Voting System provides a more realistic solution to the problem of elections in university bodies.

ROLE AND APPOINTMENT OF VICE-CHANCELLOR

INTRODUCTION

What should be the criteria for picking up a Vice-Chancellor for a university? What should be the mode of picking him up? Should he be appointed by selection or election? What kind of machinery should be deployed to discover the person who could be a Vice-Chancellor? What role is he expected to play in the present exacting and turbulent conditions in universities? What should be his salary and the requisites to be attached to his office? Should there be any age restriction to be laid down for him? These, and such others, are the crucial questions, the satisfactory answers of which should be secured to the extent and in the degree of exactness that is possible.

A Vice-Chancellor is the key university executive. Upon his ability, integrity, forward-looking dynamism, fair, just and skilful administration, constant vigilance and concern for the improvement of standards of teaching, training and research work in the university its greater success depends. His enthusiasm for academic innovations and break-through, and his keenness and readiness to go at the roots of the problems of students, teachers and the staff, the good image, the good work and the good life in the university depend. The Kothari Commission has spelled out the importance of the Vice-Chancellor in the words: "He stands for the commitment of the university to scholarship and pursuit of truth and can ensure that the executive wing of the university is used to assist the academic community in all its activities." (Report, p. 334)

SOME CRITERIA

A lot has been said and written recently about the essential qualities of head, heart and physique that a Vice-Chancellor should

possess. In the light of this available thinking, one may lay down some criteria for picking up a Vice-Chancellor of a university :

- Administrative competence, but should have good academic equipment so as to be able to provide academic leadership in the advancement of the university, without much effort or difficult adaptation.
- No strong affiliation to any political party—should be free from any particular political complexion—patterns and parties.
- Firm faith in Teacher Welfare and Student Personnel Services.
- Possession of a sharp and quick mind, fair and patient judgment, balanced approach and firm decision-making.
- Strength and vigilance for preserving university's autonomy even under the threat of losing his Vice-Chancellorship.
- Possession of human skills and human relationship.
- A good understanding of the needs and problems of the university and community it serves, and willingness to spare enough time and energy to look into the problems of the university and of the local community.
- Of such nature and way of life so as to provide easy accessibility to students, teachers and the community.

These are some of the criteria which should help in picking up a Vice-Chancellor. It is true that most of the above criteria pertain to the personality of a Vice-Chancellor. But personality, administrative acumen, academic leadership and strength of character, particularly to root out internal malpractices and to withstand any intrusion of politics into the affairs of the university, are so important considerations that if a Vice-Chancellor is picked up against these norms, it is very likely that the university and the community it serves will be the beneficiaries.

APPOINTMENT OR ELECTION?

Strong views prevail among educational thinkers and administrators on the both. It would, therefore, be necessary to examine the arguments on both the sides.

Those who hold the view that a Vice-Chancellor should be appointed rather than elected, advance arguments such as the following: It should be noted here that both the Radhakrishnan University Commission and the Kothari Commission as well as the

First Conference of Vice-Chancellors (1958) had agreed with the view that a university should appoint its own Vice-Chancellor. They further point out that :

— In election some strings are attached which would affect the complete independence of the Vice-Chancellor.

— Nomination does not mean dependence on the opinions and advice of the nominating authority.

— Electioneering in educational matters brings in a lot of politics and the havoc is wrought;

— The system of preparing a three man panel is a mockery, as two persons withdraw and one person whom the Syndicate wants to have for the Vice-Chancellor's office gets automatically appointed.

— In the recently amended University Acts, election is reduced. Even then they are not functioning satisfactorily. Election should, therefore, be eliminated altogether.

— There is a recent trend and tendency to eliminate elections in the Academic Councils, the Senate and the Syndicate because of the bad effects of electoral practice. As such it is all the more necessary to avoid election for the vital office of a Vice-Chancellor.

Those who believe that a Vice-Chancellor should be elected do so on the following grounds :

— Choosing a Vice-Chancellor by election is more democratic and consistent with the ideals and aspirations of our Republic.

— The Senate, being a supreme authority, must have a decisive say in who becomes a Vice-Chancellor. The system of appointment robs the Senate of its crucial right and duty.

— In nomination, a Vice-Chancellor is almost under obligation to act according to the wish and advice of the ministers who had a hand in his nomination.

— What was good in the earlier days, i.e the practice of appointing Vice-Chancellors during the British rule, is not applicable now. In most democratic countries, election is the method.

— Good and judicious persons in the university should discuss the matter informally among themselves, try to bring about widest possible agreement and then choose a person for the office of the Vice-Chancellor.

The issue has become a very intriguing one. Both the sides have some points in their favour. It will be, therefore, necessary to combine the merits of both the stands and evolve a formula which makes the selection of the Vice-Chancellor democratic.

The recent thinking is in favour of constituting a three-man committee to suggest a panel of three names of whom one is to be ultimately picked up by the State Governor for appointment as the Vice-Chancellor. This involves several issues. Who should constitute this three-man Committee? By what method should it be constituted? Who should ultimately pick up the one name from the three-man nominees—the State Governor? The Senate? The Syndicate? The Academic Council? Should teachers and students, who are the important constituents of a university Community, have a say in this crucial decision?

There is, what is called the Delhi Pattern, for selecting the first level three-man committee. Under this pattern, two persons are nominated by the Executive Council from among persons not connected with the university or any of its colleges, and the third person is nominated by the Visitor who also appoints one of them as the Chairman of the Committee. Under the Rajasthan Pattern, the three-man committee consists of a nominee of the University, a nominee of the Chancellor and a nominee of the Chairman, UGC. The South Gujarat, Saurashtra and Sardar Patel Universities have a different pattern, which may be called the Gujarat Pattern. Under this the three-man committee consists of persons not connected with the university or any college or institution maintained or recognised by or affiliated to the university—one nominated by the Syndicate, one nominated by the Academic Council and one nominated by a Committee of the Vice-Chancellors of the existing statutory State Universities. The person nominated by the Committee of the Vice-Chancellors becomes the Chairman of the Committee.

In the existing Acts of the Baroda University and the Gujarat University, the Vice-Chancellor is elected from a Panel recommended by the Syndicate. The Senate is empowered to elect a Vice-Chancellor from this panel of the three persons. In the Gujarat University, hard fought elections to the office of the Vice-Chancellor have taken place which displayed all the fury, noise and the politics of electioneering. In the Baroda University, barring one exception, no election has taken place. It is alleged

in its case that the University Senate, in which the power to elect the Vice-Chancellor is vested, is not able to wield this power because two persons from the panel have, almost always, withdrawn before the Senate could conduct the election. It is further alleged that the Syndicate recommends the names in such a manner that either two would withdraw, or in case there is a contest, it is limited among the persons of the panel only.

One thing appears to be pretty certain that the modern thinking approves the constitution of a three-man committee to prepare a panel of three names from among whom a Vice-Chancellor may be ultimately picked up. Who should constitute this three-man committee is a crucial issue.

Undoubtedly, these three-men should be persons eminent in the field of education or public life; they should be well versed with the objectives, programmes, functioning, problems and needs of the university concerned. They should be persons of high integrity, not amenable to pressure from any pressure group of politicians, teachers, students, etc. The C. S. Patel Committee on the Baroda University Amendment Act has made certain recommendations in this connection which appear to provide the best solution to this intricate problem. This three-man Committee should consist of one person appointed by the Senate, as prescribed under the statutes, one appointed by the Committee of State Vice-Chancellors and one appointed by the State Government, the Vice-Chancellors' nominee becoming the Chairman of the Committee.

The merits of this proposal are as follows : In the Delhi, the Rajasthan and the Gujarat Patterns, the Senate, which is the supreme body, which has a good admixture of teacher and non-teacher members, and which is the conscience of the university has almost no say in the selection of the Vice-Chancellor. This position is not democratically desirable and educationally sound. In the Baroda Pattern, the Senate is one of the three participants in forming the panel.

It brings in, and rightly too, the participation of the Vice-Chancellors of the State Universities. They, from their experience, could very well suggest a person who will be eminently fitted for this challenging office. The apprehension that they will try to push in a man of their favour is not much tenable. The Vice-Chancellors are above such scheming and intiguing.

The State Government, too, is a vital participant in the university affairs. The Baroda Proposal brings in the State Government to suggest its nominee, only so far as a nominee of it is to be suggested on the three-man panel. The involvement of the State Government in the selection of the Vice-Chancellor, to this limited extent, will not be a threat to the university autonomy. And, again when the nominee of the Vice-Chancellors' Committee is made the Chairman of this three-man panel, the danger of his dominating or his exercising influence pressurizing on the final decision of selecting a Vice-Chancellor according to the wish of the Government or the political party in power will not be there. The State Government cannot be, and should not be given a position from which it can determine the future course of developments in a university, by investing in it the power to appoint the Vice-Chancellor from the suggested three-man panel. This would be dangerous and would constitute a possible threat to the autonomy of the university.

The Baroda Proposal is unique in the sense that it leaves the authority to select the Vice-Chancellor from the panel of three prepared by the Committee to the University Syndicate and not to the State Governor as is the case under the Gujarat Pattern. The merits of the Baroda Proposal lie in the following which are laid down in the Report of the university Act Amendment Committee (pp. 16-1969):

- The selection should be better done by a body rather than an individual however highly placed and eminent he may be;
- It is fair that this power is wielded by the Syndicate, because on it the primary duty of running the administration of a university rests;
- It is fair that the team of Syndics selects or elects their own leader with whom they have to work;
- The Syndicate, being a much smaller body than the Senate, reduces the extent of canvassing and the heat of campaigning inherent in an election;
- The Syndicate being in the know of the problems and needs of the university is in a much better position to know the type of man needed by the university to be its administrative and academic leader to guide its destiny;
- The Syndicate is a smaller body carved out of the Senate. As such it is the Senate's representative. Its decision regard-

ing the selection of the Vice-Chancellor would naturally reflect the confidence of the Senate. What a larger body—the Senate—cannot possibly do without bringing in bills of election, a smaller body of the Senate—the Syndicate—should be empowered to do. In this, the Senate retains its autonomy.

When the Baroda Senate discussed the proposal on the Amendment of the Act, it was argued that the selection of the Vice-Chancellor from the three-man panel should rest with the State Governor, i. e. by an authority outside the University. It was argued that a captain of any team has to be selected by some one outside the team. The Chairmen of many important State level bodies like the Electricity Board are appointed by an outside body, i. e. the State Government which has the greater good of the public and of the organisation at heart. It was also argued that nowhere in the country, the selection of the Vice-Chancellor is done by the Syndicate. There is no new departure in the matter of appointment of the Vice-Chancellor by the Government. It is a routine practised all over the country.

But these stands were not accepted by the Baroda University Senate which ultimately passed the Baroda Proposal, which seeks to vest the powers of selection of the Vice-Chancellor in the Syndicate itself instead of surrendering its autonomy to the State Government.

The Proposal of the Baroda University Act Amendment Committee seems to offer the best possible solution, in the present situation, of the problem as to who should pick up a Vice-Chancellor and how.

It preserves adequately university autonomy. It reflects the spirit of the Radhakrishnan University Commission's observation that "it is really a part of a university's duty to learn how to choose its own Vice-Chancellor wisely and, therefore, to deprive it of this duty would be a counsel of despair." (Report, p. 217)

SOME ANCILLARY ISSUES

There are some other ancillary issues related to the appointment of the Vice-Chancellor.

One such issue is whether this office should be honorary or salaried.

The programmes and problems of the present day universities are fast becoming multi-dimensional and complex. In the early

years of the development of universities, there was not much and time-consuming work for Vice-Chancellors. This office was more of honour and distinction to be bestowed on some eminent person. It was felt that the Registrar could carry on the day-to-day administrative work of a university, and the Vice-Chancellor might attend his office for a few hours, sign papers, take some policy decisions, meet a few persons and go home. The scene is now completely changed. Today the Vice-Chancellor's work is most taxing, time-consuming and challenging. It is every inch a full time job. He has to think ahead and plan, be in live contact with the development programmes and projects of the Government, the U.G.C., the industries, the foreign and international organisations. He should be available to teachers and students for advice and guidance. He should listen to their problems, hold discussions thereon with them and help them towards the solution. Therefore, the office of a Vice-Chancellor should be a full time and salaried one.

The Vice-Chancellor should be paid reasonably well. A monthly salary of Rs. 3000 is something that can be considered reasonable. In the present mounting cost of living and increasing burden of taxation, it would be very soon, if it has not happened already, difficult to find a right person with enough private resources to be an honorary Vice-Chancellor.

There is another vital issue connected with this office of the Vice-Chancellorship. Recently, some of the State Governments have expressed themselves in favour of putting a ceiling on the age of the Vice-Chancellors of the State Universities. Normally, they do not like a person to be appointed as a Vice-Chancellor who is above the age of 60 years. But there are many who believe, and rightly too, that an age disqualification should not be prescribed for the office of a Vice-Chancellor. While there is something to say in the favour of appointing a young man of 40 or 50, who has vigour, dynamism and enthusiasm for exacting and high quality work as a Vice-Chancellor, persons of older age, say 60 or 65, should not be altogether debarred from appointment to this position. Age does bring a considerable degree of administrative experience, academic scholarship, maturity, cool-mindedness, easy grasp over situations and practical sense, which are the qualities that do contribute to the success of this vital office. It is much better to use the personality, administrative ability and academic distinction as the criteria rather than the age.

Similarly, the appointment of the Vice-Chancellor should not be for so short a period that he cannot hope to leave his mark on the university administration nor so long as to sap the life out of the university, and constitute a load for the university to carry the incumbent if a wrong choice is made. Justice S. R. Das, who wrote a Minute of Dissent to the Recommendations of the Model Act Committee that was appointed by the Union Ministry of Education (1964), has favoured the appointment of a Vice-Chancellor 'initially for a period of three years and in case he shows good promise his term may be extended by another three years and if within these six years he shows some concrete results, he may be given a third term of three years'.

In this connection, it may be said that the time should be so fixed for the office of the Vice-Chancellor as to show some really good academic and administrative results. In this regard a period of 5 to 6 years or two terms of 3 years each seems to be the best solution.

These are some of the crucial issues involved in the appointment of the Vice-Chancellor.

THE ROLE OF THE VICE CHANCELLOR

We should now consider what should be really the role of a Vice Chancellor of a modern university. This is a question of crucial importance, and, therefore needs to be properly reviewed.

In the first place, a Vice Chancellor has to be the chief executive of the University. He should be well conversant with the University's Ordinances and Statutes and should interpret and implement them firmly and fairly. He should establish certain administrative norms and ethical standards for the University Administrative Office and for the offices of the constituent colleges and must vigorously work towards creating such conditions, climate and traditions so that the administrative machinery is run according to those norms. He should particularly see that the administrative rules and regulations, bureaucratic attitudes and authoritarian approaches, and rigidity and unimaginative practices do not defeat the purpose of any educational proposal or the programme. The purpose of administration is to assist and ensure smooth and rapid development of the university programme. If it results in creating administrative hurdles and bottle-necks, the university may be well managed in the narrow sense of the term, but it will not attain great heights.

A Vice-Chancellor should be vigilant and should see that his office acts in time in regard to all educational proposals and projects and does not degenerate into a secretariat of clerks who relish more in raising difficulties through ingenious interpretation of rules, rather than working out their solutions, or suggesting some way out.

In the second place, he should have breadth of interest and wide aptitude to participate in a variety of academic, social and cultural programmes on the campus of the university and in the local community. He should be ready to attend, preside, and talk at such functions. Any ivory isolation from the students, the teachers and the society will be detrimental to the interests of the university and the society. He should have no reservation in mixing freely with groups of students, teachers, industrialists, members of civic organizations, artists, authors, scientists and so on. He should have broad versatility to be able to talk at the meetings of these groups. In this, he should be, like a Minister, capable of making speeches on all issues of public interest and concern. But he should scrupulously guard himself against getting involved in anything that is politics.

In the third place, he must know fully and intimately almost all the staff—if not that, then at least the senior members of the staff. This is one aspect of the role of a Vice-Chancellor, that the Radhakrishnan Commission had laid great stress. He must command their confidence both by adequate academic reputation and by strength of personality. The Radhakrishnan University Commission has said :

"He must know his university well enough to be able to foster its points of weakness before they become acute. He must be the 'keeper of the University's conscience', both setting the highest standard by example and dealing promptly and firmly with indiscipline or malpractice of any kind. All this he must do to keep the university alive to the duties it owes to the public which it serves and he must win support for the university and understanding of its needs not merely from potential benefactors but from the general public and its elected representation." (Report p. 422)

In the fourth place, he must have a strong and firm mind to resist all pressures, direct or indirect, from individuals or

organizations, from students as well as from teachers, to dilute the university standards of teaching and research.

Sometimes, a Vice-Chancellor who can often make trips to Delhi, and to the State Capital, who can practise salesmanship with the Ministry of Education or the University Grants Commission or the State Education Department and bring a lot of grants and big projects and programmes is considered to be a highly successful university executive. While these qualities are, no doubt, good and helpful, they, in themselves, do not make a great Vice-Chancellor. This money raising quality is never and should never be a criterion for the evaluation of the success of a Vice-Chancellor. Thus, in the fifth place, a Vice-Chancellor should not act as a travelling canvasser or a salesman for his university.

In the sixth place, he should have a dignified functioning in relation to the State Government. While he should extend all co-operation to the Government, he cannot compromise the University's objectives, cannot sidetrack the university's needs, cannot sacrifice the university's programmes, its set goals and its academic decisions, so as to please the Government or the political party in power. He should have courage and integrity to withstand governmental and political pressures.

In the seventh place, he should try to win the faith of the Syndicate and the Senate in his objectives, policies, decisions and programmes. He should not attempt to force pace and decisions, on the Syndicate, the Senate and the academic bodies of the University, but should use logic and solid facts to carry them with him in his decisions. In moments of some opposition or criticism, he should not lose his temper or get irritated. He must try to meet all opposition with reason and persuasion. But, at the same time, he should act firmly and provide clear and concrete guidelines to the governing bodies of the university, to students and teachers and to the administrative staff. He should neither play into the hands of the university governing bodies nor should aspire to play them in his own hands.

In the eighth place, the Vice-Chancellor should be in a position to exercise disciplinary control over students and teachers. This does not mean that he adopts coercive measures and puts down all acts of opposition, and differences of opinion with a strong hand. What he should do is to understand sympathetically every case—he should go at the root of the problem and remove

all causes of dissatisfaction of students or teachers. But if he finds that the latter are in the wrong, he should deal with them firmly and decisively. He should not allow any group of students, teachers or of the local community to pressurize him—to force him to agree to their unreasonable and untenable demands and threats. If a situation demands, he should be ready to quit his office rather than to compromise on a matter or an issue which is harmful to the larger interests of the university and of the academic world.

Lastly, he should learn to trust his staff and delegate duties and powers. He should not try to concentrate all authorities and powers in his hand. He must involve Deans, Senior Professors, Students' Representatives, eminent people of the society in the decision-making process to the best possible extent. He himself should recognise the fact that good ideas are not the prerogative of senior teachers, administrators, Syndics, fellows, and so on. Even junior members can contribute useful ideas. He should, therefore, encourage people to talk freely and allow them to contribute. He himself should listen more and talk less. He should be democratic. He should ensure, as far as possible, decentralised administration and democratic functioning in the university bodies and institutions.

This is broadly the role which a Vice-Chancellor of a modern university would do well to play.

CONCLUSION

In the university governance, a Vice-Chancellor plays a key role. A good Vice-Chancellor with forward looking dynamism, with the ability to provide a sound academic leadership, with administrative acumen and human skills can make a university great in every sense of the term. In order that he is able to do good work, he should have freedom to act. There is also something like the autonomy of the Vice-Chancellor. He must have reasonable freedom from the Government, from his Syndicate and from his Senate and from the society to be able to act in the best possible manner in the larger interest of the university—its standards of teaching and research, student and teacher welfare and fruitful relationship between the university and the community. The hands of a Vice-Chancellor are to be considerably strengthened, guarding against the possible danger of his being an autocrat. If a Vice-Chancellor is wisely chosen, this danger would not be there at all.

It is really a part of a University's duty to learn how to choose its own Vice-Chancellor wisely. A university should not yield its autonomy to select its Vice-Chancellor to the State Government or to the State Governor. The powers should lie with one of its own governing bodies.

A Vice-Chancellor should firstly be a good administrator, but should be in a position to provide a sterling academic leadership. Without this ability and the vision, he will be responsible for slumping down of the university in academic and research programmes. A university is not only to be well-run, but it should have a forward looking, dynamic academic programme of teaching, training and research. A Vice-Chancellor should have a vision and commitment to steer clear his university from the rut of traditionalism.

A Vice-Chancellor should be a full-time salaried person. His remuneration should be consistent with his high office. Advanced age—an age of 60 to 65—should not be a disqualification to his high office.

The principle of election should be eschewed as far as possible from the field of university governance. A Vice-Chancellor should preferably be selected. The best guidelines in this respect are provided by the Baroda University Act Amendment Proposals.

A Vice-Chancellor's term of office should not be too brief nor too long. Two terms of three years each seem to be the most reasonable one.

It is a fact that most of the Vice-Chancellors of our universities are not chosen for their administrative competence, but for their high academic standing or for their demonstrated leadership among men and of their own profession. Shri C. D. Deshmukh has been strongly advocating the establishment of a dual leadership, whereby the Vice-Chancellor would handle major matters of policy and a President or Principal would handle day to day administration on a long term or even permanent basis. His observations do support the appointment of Rectors or Pro-Vice-Chancellors in our universities. This office is undoubtedly a source of strength to the administration of universities. This would save not only considerable time and energy of the Vice-Chancellor and leave him enough time to attend to academic matters, but relieve him of many headaches about things for which he may be technically responsible but for which he may be

conspicuously unsuited. The Pro-Vice-Chancellor should also have expertise advice and help in organisational matters in effecting changes in the running of its administrative machinery, in surveying the needs of educational institutions under the university and the actual utilisation of the resources and facilities available in them, in building operations, in office accounting and in a number of duties assigned to him by the Vice-Chancellor. The days of all knowing one man are over. Problems and programmes are getting much complex. Help is necessary in meeting and evaluating these problems and achievements. A great deal of wastage goes on in our universities, because the problems of day-to-day university administration are not well taken care of and a machinery of expertise advice and competent help is not created in them. The U.G.C. should consider such reforms in university administration for financial support in order that universities can do a much fuller and better job!

TEACHER AND NON-TEACHER REPRESENTATION OF UNIVERSITY BODIES

INTRODUCTION

An unfortunate controversy over the representation of teacher and non-teacher elements on the governing bodies of universities has burst out in some of our universities. It is further unfortunate that attempts are being made to add fury to the controversy by mixing up wrongly this issue with that of the autonomy of teachers. One is reminded of those days when religious passion was inflamed by raising the holy cry of a religion being in danger. The same is being attempted now by raising the cry of the autonomy of teachers being in danger. This is not an issue of anybody or anything in danger. It is not an issue of bigotry and partisan cult. It is a rational issue to be considered objectively and in perspective of the changing functions of a modern university.

We want our universities to increase their older functions in range, depth and complexity. As the Kothari Commission has said, their tasks are no longer confined to the twin traditional functions of teaching and advancement of knowledge. We want our universities to develop greater sensitiveness to the needs of our fast developing society and make an all-out possible effort to meet these needs. The old traditional belief that scholarship and academic excellence thrive only in isolation is not in the best interest of universities themselves and of the society. In a scientific age, we should approach all issues, educational or otherwise, in a true scientific spirit without passion and prejudice.

In science we do not base our conclusions on inadequate and biased data. Let us remember this while taking a stand on the issue of the representation of the teacher and non-teacher elements on university governing bodies.

TEACHING VS NON-TEACHING ELEMENTS

It needs no argument to convince a student of the modern Indian education that a modern university, as was the case in ancient or medieval universities like Takshashila or Nalanda, cannot be expected to be run entirely by a body of academicians or teachers. That old concept has been almost given up for good. Universities, like other educational institutions, are primarily social institutions. They have to cater to the needs of the society, and, these needs are many and varied. A modern university has to be responsive to public opinion and sentiment, perhaps much more than the politically constituted bodies. The Senate has, therefore, to be a representative society in miniature of its enlightened and interested members. The money for running our universities, and it is not small, it is as high over one crore and more in case of some universities—comes from public grants and tuition fees paid by parents or guardians. The management of a University Fund cannot be an exclusive claim of teacher elements on the University bodies. The administrative and financial problems are many, and they are to be dealt with objectively and rationally. Under these circumstances the co-mingling of teacher and non teacher elements on the Senate and the Syndicate is not only desirable, but also it is indispensable. This issue of representation of teacher and non-teacher elements on Senates and Syndicates has been discussed thread-bare umpteen number of times at periodical Conferences of Vice-Chancellors of Indian Universities and their general verdict is—I quote from the Report of the first such Conference—"There has not been any great violence on account of this co-mingling because these representatives—the lay representatives are a little lost with the academic element of the Senate becoming progressively more active and assertive" (p. 62). We have on record observations of distinguished Vice-Chancellors like Dr Mudaliar of the Madras University who has said, "I have never found in my 24 years of working on these bodies a single occasion when the Senate found it possible to reject any sound academic proposals" (p. 63). Similar observations can be made about the Senate of every university in the country.

The recent trend in Britain and the rest of Europe and in a number of Asian countries is to provide for a dual, lay and academic, control. I would like to quote from a study of the structure of newer universities in Britain by an Indian scholar of

no less eminence than Dr. C. D. Deshmukh, the first U. G. C. Chairman. His conclusion is : "The judgment pronounced with some authorities in this connection is that the structure is weighed with lay representation and that the new universities tend to grant little voice to academic members in matters of administration."

George Kneller, on whose book on *'Higher Learning in Britain'* I have drawn extensively, points out that the late Professor Laski wanted greater lay participation in both legislation and administrative control and advocated the representatives of all segments of the society on the governing bodies of university. Dr. Deshmukh, too, has recognised, in perspective of social and economic urgencies in Indian situation that "democratic representation on university bodies will be a source of strength to the university."

I would end my comments on the need for balanced representation of teacher and non-teacher elements on the Senate and the Syndicate of a university with a brief citation from Sir Fredrick Ogilvie. He has pointed out in a recent publication that "The dual system of administration in modern universities has its moment of friction, but it at least ensures that the educational essentials are not the responsibility of the academic staff alone. It can enlist administrative experts who know their business and can save the Professors time and energy for theirs." I would conclude the issue of balanced representation of lay and academic elements on the Senate by quoting from the Reports of the expert bodies on university governance like the Model Act Committee or the Kothari Education Commission or even the Robbins' Committee of Britain. They have recommended balanced representation of teacher and lay elements on Senates and Syndicates. Fifty-fifty per cent representations to these elements have been suggested by them and this is what is being done in amendments of many University Acts now.

Even amongst the representatives of the teachers on the Senate, seats are being provided to Faculties and constituent colleges that have a large staff. Each Faculty gets a seat under a separate registered graduate constituency. That was not the case with some Faculties in the old Acts. This is certainly an improvement. It is a distinct gain.

It is sometimes contended that one senior-most Professor from each Faculty should sit on the Senate and this may be provided through rotation. The question is : Why Professors

only ? Why create a new oligarchy of Professors ? Or, is there somewhere lurking an apprehension that with permanent assistant lecturers having been now given voting powers, it would be really difficult for Professors and senior teachers to get themselves elected if the army of assistant lecturers do not support them or if they would themselves like to seek election ? Keller has drawn attention to what he considers to be a serious defect in the organization of modern universities—the majority of Faculty members below the grade of Professors have no legal avenue of direct participation in university governance, and Sir Eric Ashby also has emphasized the fact that Professors and heads of departments seldom consult or attach importance to views and opinions of their junior assistants. And again, a number of Professors even now have seats on the Senates of universities.

One has a hunch that by merely seeking to increase the representation of Professors, as a matter of fact, the number of teachers against non-teachers, the climate and quality of work in the Senates are not likely to improve automatically. Much depends upon the personalities, make-up, enthusiasm, dynamism and ideas of the individuals who will sit on Senates. Even one such dynamic forward-looking teacher can carry the whole Senate with him on sound academic issues. Similarly, a few members of the non-teacher section can cast a magic spell on the House and carry it to the goal's set by them. Therefore, this controversy over sending in more teachers or less, or sending a certain number of Professors is futile. If we send a right type of persons to Senates and Syndicates, all problems will be largely solved.

When a university's programme cuts across traditional frontiers and extends largely into trade and business, industry, banking, administration, engineering, technological and scientific fields, experimentations and researches in many complexes, is it not desirable, is it not in the best interest of a university itself that experts from each one of these fields are closely associated with its work and administration ? It should be noted that these persons will be most reluctant to fight elections from registered graduate constituencies, or for that matter from any other constituency. How can then a university expect to get their association and advice ? There is only one way to get the benefit of their deliberations and advice, and that is they be recommended by the university to the State Government for nomination on the University Senate.

It is sometimes argued that in all the universities in the country the number of nominated members should be cut down to ten or fifteen. But this may be all right with purely an affiliating university where the programme of studies will be few and limited. In a teaching university which aims at developing a rich variety of courses, the 20 nominated members or so cannot be considered much. To reduce it to a small number would not be in the final interests of the university. I again quote from Professor N. S. Pillai, one time Vice-Chancellor of the Annamalai University, who maintained that a University Senate should have a more varied representation and at least have one-third element largely coming in as nominated members.

In regard to the number of nominated members, three other significant points need to be noted. Many universities in India have, in the last several years, a chain of high deficit budgets, and this deficit is, to some extent, due to the grant-in-aid policy of the State Government. The nominated Government members, if they are so ordained, are likely to help in creating better appreciation of the financial needs and difficulties of the university and easing its financial tension. They might also help in raising additional funds if a right approach is made to them by taking them into our folds.

Secondly, there is some difference in nominated members of some universities. The fact, which is often lost sight of, is that some of the persons nominated on the Senate are teachers elsewhere.

Thirdly, nominated members on a University Senate do include almost every where, besides the teachers in other institutions, quite a large number of persons who have had teaching experience of one type or the other. How can it be then maintained that this category of nominated members, despite their background in actual teaching work and high academic interest, is no good? Or, that they are non-academics? To define a teacher only as one belonging to one university and who is drawing his salary only from the funds of that university is too narrow a concept. One has a hunch that such an interpretation is not educational; it is anything else but not educational. To say that teachers, because they belong to other universities or organizations, cannot understand the needs of one university's teachers or safeguard the academic interests of that university's students, is too shallow an argument to merit any serious consideration. The fear that they would be tools in per-

petuating some kind of oligarchy or tools in the hands of pressure groups in the university does no credit to any of the members of university Senates nor to those who entertain it

ACADEMIC BODIES

The Academic Council, Faculties and Boards of Studies are academic bodies. They are concerned with determining courses of studies, rules for examinations and criteria for maintaining and upgrading standards. This is purely a teachers' field, and it stands to reason that the university teachers should be the main determinants of these issues.

But most, if not all, academic questions have financial implications also. Decisions on these issues have to be taken keeping in mind the financial resources of a university and the additional funds that it can reasonably be expected to raise.

Academic enthusiasm often tends to overlook or subordinate financial issues. There is, therefore, the need of objective assessment. The non-teacher element as well as the teacher element have to share this responsibility.

THE SENATE

It is perhaps here and nowhere else that the teachers, the general public and state legislature are all alike interested.

Universities cannot possibly function in a vacuum. They have to be ever responsive to public opinion and sentiment. This they should do more than even politically constituted bodies, because they are the true social institutions and they cannot blunt the edge of their social purpose.

The co-mingling of teacher and non-teacher elements on university Senates has been always there in Indian universities ever since they were founded in modern times.

And there has not been any great violence on account of this co-mingling. The fact, however, is that the representatives of the non-teacher elements are a little lost where the teacher element is vigilant and where it has demonstrated its forward-looking dynamism.

Let the facts be faced as facts. Let not ill-placed propaganda be brought forth to vitiate the image of teachers that they do not have tolerance to discuss and decide larger issues of university administration and finance by sitting along with the non-teacher elements in a balanced position.

The Senate is concerned with passing university budgets. University budgets involve public money. As it is said earlier, it does not stand to reason to maintain that teachers' representatives on the Senate can alone decide—or they decide from a position of dominance—expenditures involving public money.

THE SYNDICATE

It is the pivot force in a university. It is concerned with the day-to-day administration of the University. All appointments of the university staff are done by a Syndicate. Recognition of teachers in affiliated colleges, appointment of examiners, the final approval of examination results are done by this body. A Syndicate keeps an eye on university finances. It deals with all matters concerning teachers' or students' acts of indiscipline. Several other aspects of the functioning of a university are the responsibility of a Syndicate.

When such functions are given to a Syndicate, is it not fair that it should have a balanced representation of teacher and non-teacher elements?

CONCLUSION

The current expert opinion favours the co-mingling of teacher and non-teacher elements on the Senates and Syndicates of universities. There is no reason to believe that the opinion of expert bodies like the Model Act Committee or the Kothari Commission is wrong.

STUDENT REPRESENTATION ON UNIVERSITY GOVERNING BODIES

The demand by the university student community for representation on the governing bodies of universities is gradually emerging on the Indian education scene. The publication of the Report of the Education Commission has given a bit of momentum to this demand. Though the National Council of University Students in India has not yet articulated this demand, many feel that it is around the corner. However, the opinion in the community of university students, teachers and administrators is divided on the issue. The general opinion seems to be in favour of a rational, realistic but sympathetic approach to the problem. "We should not rush in, at the same time we should not shut our eyes to the new role being expected of university students" is the broad reaction of the wiser and saner elements of the student community as well as of university administrators and teachers.

INTERNATIONAL PRACTICES

In Europe, there has been, in recent years, growing appreciation of the fact that social situation is rapidly changing. Men and women of student age are expected to bear the full responsibility of adult life much earlier now than was the case a generation ago. So, some of the countries like West Germany have moved towards giving effective representation to university students on the governing bodies of their universities. France is also contemplating a similar move. In a number of old and red brick universities, students have long been given effective representation, not on the Syndicates and Senates of universities, but on their Standing Committees which deal with student needs and problems. Thus, university students in many European countries are being given a good opportunity to place their views and feelings, on all matters affecting their life, before the university administrators.

A RECENT BRITISH AGREEMENT

Recently, the Committee of Vice-Chancellors and Principals of the British Universities and the National Union of Students of Great Britain have signed an agreement on October 7, 1968. Their Joint Statement which has been released to the public has taken note of three vital dimensions of the issue: (1) The problem of how students can make their views effectively felt within the decision-making process in an individual university is not a simple one. (2) In view of the fact that the period of students' stay in a university being quite short, they can play a limited effective role in university government; (3) There are certain areas of university-decision making where student participation can be full, in certain areas students' views should properly be taken into account, though the ultimate decision must be that of the statutorily responsible body, and in certain areas where student presence would be totally inappropriate.

COMPLETE STUDENT RESPONSIBILITY

The Joint Statement maintains that in the area of operation of the whole field of student welfare—for example, health services, catering facilities, provision of hostel accommodation, etc. there should be varying degrees of participation of students in the decision-making process. But in the area which covers, for example, the operation of Student Unions and the management of a wide range of extra-curricular activities, students should have complete responsibility.

CURRICULUM AND EXAMINATIONS

In areas of curriculum and courses, teaching methods, deciding tools and procedures of examinations and evaluation in areas of major organizational matters and in issues concerning the planning and development of the university, the Joint Statement has recognized that, the ultimate decision must be that of the appropriate statutorily responsible body like the Syndicate, Senate, Board of Studies, Academic Councils, Councils of Post-graduate Studies and Research and Faculties. However, the Joint Statement regards it as essential that even in these fields, students' views should be properly taken into account.

STUDENT PRESENCE INAPPROPRIATE

The Joint Statement is very clear that student presence or participation in university decision-making on appointments, pro-

motions and other matters affecting the personal position of members of the staff, as well as the admissions of individuals and their academic assessment, would be inappropriate. The Statement, however, adds that students should have opportunities to discuss the general principles involved in such decisions and have their views properly considered.

STAFF-STUDENT COMMITTEES

A welcome suggestion that the Statement has made relates to the development of joint staff-student committees in new and more effective forms, with substantial student membership and with a status equal to that of other statutory committees of universities.

JOINT DELIBERATIONS

Before the demand of student representation on governing bodies in Indian Universities becomes ugly and irrational, it would be desirable that a dialogue is established among Committees of Indian Vice-Chancellors, Associations of University Teachers and the National Council of University Students in India, and an agreement is sought to be reached on definite areas where student representatives should have full, partial and no participation in university-decision making processes. We, too, should have a joint Statement of our Vice-Chancellors and National Student Unions to run universities.

FORMATION OF UNIVERSITY SYNDICATES

The recent debates on the amendments of the constitutions of universities have brought to light several inadequacies in the existing university legislations. These gaps are in the process of being bridged.

TRADITIONS CHALLENGED

The controversies engendered by these debates have shaken to the root some of long established practices in university administration and demolished some of the long held stands on the formation and functioning of university governing bodies.

The traditional view-point that every university should invariably have an Academic Council is being challenged. The focus is shifting from the Academic Council to individual Faculties and joint deliberations of Faculties on issues of common concern.

The composition of University Senates is acquiring a more social character, without blurring the focus on the effective participation of teachers.

The concept of teacher representation is moving out of the narrow groove of meaning only the teachers in the university to a longer concept of 'teachers in the local as well as other institutions of higher learning, training and research'.

A new development of Student Council and through 'students' representations on Senates is being structured.

FORMATION OF SYNDICATES

But perhaps a more revealing change is evident in the thinking on the composition and formation of University Syndicates.

In almost all University Acts, there is a provision for the State Director of Education to sit on the Syndicate as an

Ex-officio member His association with the Executive Councils of State Universities is not being questioned The question that is now being posed is Will it not help the State Universities better if the Education Secretary sits on their Syndicates as an *ex-officio* in light of the fact that the major difficulty of all State Universities stems from the manner in which their Block Grants are determined in the State Education secretariat? The involvement of the Education Secretary in the decision-making process of the University Syndicate and a face-to-face dialogue with him by its members in the university setting may perhaps help in developing better appreciation of university needs and problems and thereby in reducing their current deficit budgeting

Syndicates of Indian Universities usually do not have nominated members The exceptions are there, but they are more due to historical reasons peculiar to these universities The current thinking favours one or two nominated members on the Syndicate The Kothari Commission, for instance, recommended the nomination of four persons on the Syndicate (Report, p 336) The Committee on 'Model Act for Universities' has expressed a similar view-point (Report, p 21)

Excluding the *ex-officio* and nominated members, the Syndicate has two categories of members, the teacher and non-teachers Among the teacher members, are the representatives of Deans, Principals of affiliated colleges and full time teachers in colleges and university departments

THREE VIEW-POINTS

Regarding the appointments of the Deans and teacher-members, three major view points seem to prevail One opinion favours their appointment on the Syndicate either through rotation or partly through rotation and partly through nomination by the Chancellor on the recommendations of the Vice-Chancellor

The second opinion favours their election from among themselves that is, Deans to elect Dean members and teachers to elect teacher members

The third opinion, which is the most recent and challenging one, maintains that as the Syndicate is constituted from the Senate which is the supreme parent body, the Deans and teachers should get elected by the majority vote of the members of the Senate

The focus in this view-point is evidently on the election of all the three categories of Syndicate members, on an uniform and comparable basis, from the Senate itself

The current position in a number of universities is that only the non-teacher and the Dean members of the Syndicate are elected by the Senate, whereas the teacher-members are elected by members of the Faculties of the university.

This anomaly in the case of the election of the non-teacher members and the teacher members of the Syndicate is being challenged.

The fairest and the most rational approach should be one of parity and uniformity. In educational elections, separate electorate cannot be justified. If it is maintained that teacher representatives of the Syndicate are to be elected from teachers, then why not non-teacher representatives from the non-teacher members of the Senate?

The teacher community has had an opportunity to elect their representatives to the Senate. Among these representatives the teacher members of the Syndicate are going to be picked up. Why then again require that for going to the Syndicate they should again seek a mandate from the teacher community? This does not stand to reason.

DESIRABLE

It is, therefore, desirable that the formation of Syndicates should not cause further controversies and add unnecessary heat to already hot debates.

As recommended by the Model Act Committee and by the Kothari Commission, the Syndicate should consist of 16-20 members.

The Vice-Chancellor, the Pro-Vice-Chancellor or the Rector, if there be any, the State Director of Education and/or the State Education Secretary be the *ex-officio* members.

Half the members should be teachers and half non-teachers.

Elections of teacher and non-teacher members should all be by the Senate, which is the supreme body of university governance.

The governance of universities does need a change. But it should be fair, objective and rational, resulting in better and more effective functioning of our universities. Sooner the partisan and ugly debates are buried, the cause of higher education will be better served.

DISCUSSIONS IN UNIVERSITY SENATES

Every meeting of a Senate should be a big event in any university inasmuch as the Senate is its supreme deliberating and law-making body.

RECENT DEMANDS

The meetings of the Senate provide acid test of the validity of some of the recent controversies and conflicts on the issues of relative representation of teachers and non-teachers and on the nature and the size of the government-nominated members on the Senate.

Recently vehement demands have been put forward for greater representations to university and college teachers on university Senate. The argument is that the academic element should have a greater and more effective voice in the decision-making process of a university. A certain number of seats on a Senate are also being demanded for professors by University Teachers associations.

On an idealistic ground of democratic administration and as a basic principle of academic functioning, a strong plea is also being put forward to extend the voting right in Senate elections even to assistant lecturers—in fact, to all categories of teachers without any stratifications.

Those who claim to speak on behalf of the teacher communities maintain that in the Senate and in the Syndicate the non-teacher representatives should be in minority. This claim is being challenged by the other party.

HOLLOWNESS OF CONTROVERSIES

But if one studies the actual proceedings of university Senates, the hollowness of this controversy becomes revealing.

Why is greater representation of teachers demanded on the University Senate? Is it because that they can contribute more and better to the deliberations of this supreme body?

If this is the argument for the fight for more seats for teachers in the Senate, it is a losing fight. The truth is, very few teacher-representatives come forward to initiate discussion.

Very rarely teacher-members take firm positions. A good majority of them hardly participate at all in any discussion.

It is a fact that more non-teacher members than teacher-members keep the Senate proceedings going. By objective evaluation, the contributions of the latter are more. The latter also keeps the Senate proceedings lively and vigorous.

Not that teacher-members do not speak. Some of them do speak and undoubtedly they make valuable contributions. But their number is far and few between considering the size of the representation of teachers on the Senate.

Again, as one of the Ahmedabad Newspaper Correspondents, while reviewing a recent Senate session of one of the universities of Gujarat, observed, practically one sees the same old familiar figures rising up to speak and they make the same noise-take almost the same type of stand every time. One hardly finds that issues are considered differently on merits.

There are quite a good number of members in the Senate of every university who hardly have opened their mouths, even once during their five-year membership of this supreme body.

NOMINATED MEMBERS

The same is true, to an equally large extent, in the case of certain categories of ex-officio members and nominated members of government departments.

If these members do not contribute in any way to the deliberations of Senates, a question naturally arises, what is the real purpose served by giving them representation on the Senates?

GOVERNMENT REPRESENTATIVES

In a recent debate on the budget estimates in the Senate of one of the universities of Gujarat, a firm role was suggested for the representatives of government departments on Senate by some members. They should interpret the developments and needs of the university to Government and play a positive role in reduc-

ing deficits in their budgets by persuading Government to modify its financial policy to the state universities.

In the same meeting, nominated members of industries and businesses were also assigned a role, viz., of helping in raising funds for expansion and development of the University.

TONE OF SENATE DISCUSSIONS

The fact is, the Senate discussions need to be made more systematic, more constructive, more effective and more representative. There should be balance, poise and dignity in Senate speeches. Catching the public eye should not be even the remotest objective in Senate speeches.

Senate members have a duty and obligations to the university and to the society to place a stamp of their wisdom in the decision-making process of the university. Every member owes to those who elected or chose him or to the Government which nominated him to give the fullest benefit of his knowledge, skill and vision for the advancement of the university.

Here is a calling from which there is no going back.

: 9-13 :
**FOR BETTER HIGHER TECHNICAL
EDUCATION**

THE CHANGING PATTERN OF UNIVERSITY ORGANIZATION

Twenty years back, when the University Education Commission, under the Chairmanship of Dr. Radhakrishnan, reported on the reconstruction of university education, it had made two significant observations on the changes to be brought about in the traditional pattern of university organization in the country. Firstly, it had said that "to require all the new universities to grow out of the existing system would be to impose needless and hampering limitations on our educational possibilities". Secondly, the Commission had held that "there is a vast field of pioneering before us in the process of evolving new institutions of higher learning." (Vide-Report, p. 555.)

These observations marked, in a way, a beginning of a change in the thinking regarding university organization. The growing national impulse gave an edge to the idea of developing a new type of institutions of higher education. The emphasis that began to be laid on the development of agriculture in the Five-year Plans heralded, in a way, a break-through in the concept of the pattern of university organization. Since then not only new types of universities like the Agricultural Universities, the Sanskrit Universities, the Agriculture and Technology University and the Kala Sangeet University have come to be established in the country, which do constitute a break-through in the traditional concept of the field and scope of universities, but also single-faculty universities and double-faculty universities have come to be accepted for the first time in the history of Indian universities as valid propositions. The idea of separate universities of technology should be viewed as a further development and a logical extension of

these departures that have already found a place in the pattern of university organizations in the country.

WHY THE UNIVERSITY EDUCATION COMMISSION OPPOSED THE CONSTITUTION OF TECHNICAL UNIVERSITIES

The idea of establishing separate technical universities or raising some of the existing technical institutions to the status of independent universities is, in fact, not a new one. It was set forth by several witnesses who gave evidence before the University Education Commission in 1948.

But the suggestions of the witnesses did not go beyond raising some of the existing technical institutions to the status of independent universities. The Commission rejected the idea of separate technical universities mainly on the ground that the function of a university is to provide all round education. The following quotations support this conclusion.

- "A university is more than a technical school. It should be a place for providing a student with opportunity for all-round, well proportioned education for effective living and for citizenship in addition to preparation for a calling." (Report, p. 551)
- "Since no institution can be excellent in everything, it is desirable that areas of special strength be developed in all but perhaps the largest of our universities. However, these areas of special strength should be in addition to facilities for all-round higher education and should not be a substitution for such." (Report, p. 551)
- "The advantage of association (of a technical school) with a university is that it enables the staff in the technical school to be supplemented by faculty members in science, business and general education." (Report, p. 249)

TECHNICAL UNIVERSITIES TO BE BROAD-BASED

The basic flaw in the suggestions made by the witnesses before the Radhakrishnan University Education Commission was that they sought to develop higher technical institutions into technical universities through retaining their character as purely technical institutions. We can take a clue from and profit by the mistakes of our elders in the past, if the idea of establishing separate technical universities is to be pursued further.

- We should accept the fact that a technical institution cannot function as an independent university by remaining as a technical school in the narrowest sense of the word. It will be necessary to broaden the scope of its courses and programmes beyond those of a stereo-typed technological school, and break down the isolation of technical education from general education to the best possible extent.
- It will be necessary to develop in a technical university large departments of fundamental sciences and institute courses in humanities, social sciences, business education, etc., that would be more in harmony with the needs of technical students.

This is exactly what is done in the famous Massachusetts Institute of Technology of the U.S.A. When the M.I.T. moved from Boston to Cambridge, it began to broaden the scope of its courses beyond those of a stereo-typed engineering school. Large departments of fundamental sciences, and courses in humanities and social sciences were added so that it might be possible to give the 'engineer' or the 'technologist' a very broad-based education and also keep him in touch with living progress in the fundamental sciences. If technical universities can be organised in India on such a broad pattern, there should not be any difficulty in accepting the idea as a sound educational proposition. There is only one hunch. The teachers of humanities, social sciences, or business management living and working on the campus of a technical university will not have that kind of extensive and deep involvement in activities of professional growth, such as frequent meetings, and seminars, and discussions with fellow workers in the field, as would be the case in a many-faculty university. It is possible that they would feel a kind of isolation from the co-workers in their fields. But this kind of professional loneliness can be reduced by providing such teachers more and frequent contact with, and feed-back from, their counterparts in different universities and colleges. This shortcoming is not of such a character that it cannot be dealt with through better planning and organization.

SOME STERLING GAINS

Apart from the fact of practicability of establishing technical universities in India, I visualise some sterling gains in establishing them. These gains will be both on the side of university governance,

and on the side of developing higher technical education in consonance with the recent advances in curriculum development, instruction and training in the field, and in the context of the growing developmental needs of the country to which technology can contribute handsomely.

It is to be noted that in the existing pattern of university governance in the country, the Academic Council is a crucial body in all academic matters. As this Council is representative of all the Faculties in a university, it very often acts like a steam-roller in the name of co-ordination and uniformity, and the possibility of its acting as a damper to the innovations and experiments that individual faculties may desire to undertake, always remains. In single faculty universities, this possibility is never there. They are able to maintain and strengthen their unity and coherence in curriculum development, in teaching and training, in research and experimentations and in evaluation procedures. If we have a separate technical university, instead of a technical faculty of a multi-faculty university, the question of the medium of instruction will not pose a very intricate and conflicting problem. Further, it would be easier and quicker to undertake a variety of instructional and training programmes without the fear of a check and control from the general Academic Council. A good deal of innovations in content, teaching methods, practical training, and examining procedures would be possible in the uni-faculty technical university.

Apart from the advantage of having an unhampered academic climate in a technical university, there would be other equally significant advantages.

The Technical University can have, as its Vice-Chancellor, a renowned professor of technology or an administrator who is both an expert in the field and who had had rich and extensive experience in the planning and development of technical education in the country. Such an informed and experienced leadership for a technical university would be a distinct gain. The leadership would strive to keep the programme of the university geared to the expanding national needs, it would ensure better liaison between the university on the one hand and the technical council and governments in the State and at the Centre on the other, and would achieve a closer relationship with the users of the products of the technical university.

better ensured through the efforts of the academics of a technical university rather than the bureau-racy of a technical department of the Government. Some of the current problems that plague technical education, such as, low standards of technical training, unemployed graduates, shortage of technical teachers, inadequate modernity in technical courses and equipments, high rate of wastage, lack of participation in technical manpower planning by universities, etc. can be better tackled by technical universities which have better motivation, expertise and resources to probe into their causes objectively and can be better solved. In brief, there is a reasonably valid case for establishing technical universities in the country.

APPENDIX I

SOME VITAL STATISTICS OF INDIAN UNIVERSITIES

TABLE I

Expansion of Universities and Colleges
(1855 to 1968)

A. Pre-Independence Years

| Year | Universities | Colleges | Students |
|------|-------------------------------|----------|----------|
| 1855 | 3 (Established in 1857) | 28 | 3,958 |
| 1882 | 4 | 68 | 7,922 |
| 1902 | 5 | 179 | 23,009 |
| 1922 | 10 | 248 | 65,652 |
| 1937 | 15 | 346 | 1,16,605 |
| 1947 | 19 | 532 | 2,41,794 |

1947 Index

with 1855=100 633 1,900 6,108

B. Post-Independence Years

| Year | Universities | Colleges | Students |
|------|--------------|----------|-----------|
| 1951 | 27 | 735 | 3,96,745 |
| 1956 | 32 | 746 | 7,12,697 |
| 1961 | 46 | 1,537 | 10,34,934 |
| 1966 | 73* | 2,572 | 17,28,773 |
| 1968 | 80* | 2,899 | 22,18,972 |

1968 Index

with 1947=100 421 562 917

* Including institutions deemed to be universities

TABLE II
Trends in University Enrolment
(1950-51 to 1967-68)

| Year | Enrolment | Increase over the preceding year | Percentage increase |
|---------|-----------|--|------------------------|
| 1950-51 | 3,96,745 | | |
| 1951-52 | 4,59,024 | 62,279 | 15.7 |
| 1952-53 | 5,12,853 | 53,829 | 11.7 |
| 1953-54 | 5,80,218 | 67,365 | 13.1 |
| 1954-55 | 6,51,479 | 71,261 | 12.3 |
| 1955-56 | 7,12,697 | 61,218 | 9.4 |
| 1956-57 | 7,69,468 | 66,771 | 8.0 |
| 1957-58 | 8,27,341 | 57,873 | 7.5 |
| 1958-59 | 9,28,622 | 1,01,281 | 12.2 |
| 1959-60 | 9,97,137 | 68,515 | 7.4 |
| 1960-61 | 10,34,934 | 37,797 | 3.8 |
| 1961-62 | 11,55,380 | 1,20,446 | 11.6 |
| 1962-63 | 12,72,666 | 1,17,286 | 10.2 |
| 1963-64 | 13,84,697 | 1,12,031 | 8.8 |
| 1964-65 | 15,28,227 | 1,43,530 | 10.4 |
| 1965-66 | 17,28,773 | 2,00,546 | 13.1 |
| 1966-67 | 19,49,012 | 2,20,239 | 12.7 |
| 1967-68 | 22,18,972 | 2,69,960 | 12.9 |

TABLE III

Frequency Distribution of Universities According to Enrolment

A. 1961-62

| Enrolment Range of the University | No. of Universities within the size range | Total Enrolment of the University in the size range | Percentage of Grand Total |
|-----------------------------------|---|---|---------------------------|
| 1-1000 | 6 | 3,252 | 0.3 |
| 1000-10,000 | 13 | 78,863 | 8.0 |
| 10,000-25,000 | 12 | 2,14,313 | 21.9 |
| 25,000-50,000 | 9 | 2,91,785 | 29.8 |
| 50,000-100,000 | 5 | 2,77,350 | 28.3 |
| More than 100,000 | 1 | 1,14,817 | 11.7 |

B. 1967-68

| | | | |
|-------------------|----|----------|------|
| 1-1000 | 10 | 3,432 | 0.2 |
| 1000-10,000 | 24 | 93,534 | 4.8 |
| 10,000-25,000 | 19 | 3,38,162 | 17.6 |
| 25,000-50,000 | 20 | 7,67,308 | 39.8 |
| 50,000-100,000 | 4 | 2,83,825 | 14.7 |
| More than 100,000 | 3 | 4,41,591 | 22.9 |

TABLE IV
Some Aspects of Expansion in University Education

| Item | 1950-51 | 1955-56 | 1960-61 | 1965-66 |
|--|----------|----------|----------|-----------|
| (A) Universities | | | | |
| No of Universities | 27 | 35 | 45 | 64 |
| No of Uni Teaching Departments | 237 | 305 | 479 | 690 |
| Enrolment in Uni Teaching Dept | 31,321 | 49,476 | 73 381 | 1,00 000 |
| Teachers | 3 085 | 3,497 | 5,589 | 8,500 |
| Expenditure (Rs lakhs) | 4,90 53 | 7,18 05 | 1,413 89 | 2,500 00 |
| (B) Institutes Deemed to be Universities | — | 2 | 3 | 9 |
| (C) Research Institutes | | | | |
| Number | 18 | 34 | 41 | 50 |
| Expenditure (Rs lakhs) | 62 56 | 139 04 | 2,69 86 | 600 00 |
| (D) Colleges for Arts and Science | | | | |
| Number | 498 | 712 | 1,039 | 1 500 |
| Enrolment | 3,10,123 | 5,22 530 | 6 91 632 | 10 00 000 |
| Expenditure (Rs lakhs) | 417 14 | 11 64 74 | 2 091 53 | 3 000 00 |
| Teachers | 15,312 | 23,812 | 35,555 | 50 000 |
| Average Annual Salary per Teacher (Rs) | 2,696 1 | 3,069 9 | 3 658 9 | 4 000-00 |
| (E) College for Professional Education | | | | |
| Number | 208 | 346 | 852 | 1,200 |
| Enrolment (in '000's) | 54 | 94 | 194 | 300 |
| (F) Cost per Student Per Annum | 331 8 | 583-0 | 424 1 | 800-00 |

TABLE V

Faculty-wise Expansion in Universities
(1956-57 and 1967-68)

| Faculty | Enrolment in Lakhs (1956-57) | Enrolment in Lakhs (1967-68) | 1967-68 Index 1956-57=100 |
|---------------|------------------------------------|------------------------------------|---------------------------------|
| Arts | 3.96 | 9.18 | 231 |
| Science | 2.10 | 7.38 | 351 |
| Commerce | 0.67 | 2.20 | 329 |
| Engg. & Tech. | 0.21 | 1.05 | 500 |
| Medicine | 0.23 | 0.84 | 365 |
| Vet. Science | 0.04 | 0.07 | 175 |
| Education | 0.13 | 0.43 | 331 |
| Law | 0.20 | 0.45 | 225 |
| Agriculture | 0.10 | 0.52 | 520 |
| Others | 0.05 | 0.09 | 180 |
| Total | 7.69 | 22.19 | |

TABLE VI

Faculty-wise Distribution of University Enrolment in
Percentages

(Figures in Percentages)

| Faculties | 1956-57 | 1960-61 | 1964-65 | 1967-68 |
|---------------|---------|---------|---------|---------|
| Arts | 51.5 | 44.9 | 42.0 | 41.4 |
| Science | 27.3 | 30.0 | 31.3 | 33.3 |
| Commerce | 8.7 | 10.2 | 9.7 | 9.9 |
| Education | 0.13 | 1.5 | 1.9 | 1.9 |
| Engg. & Tech. | 2.7 | 3.6 | 5.1 | 4.7 |
| Medicine | 3.0 | 2.7 | 4.0 | 3.8 |
| Vet. Science | 0.5 | 0.5 | 0.4 | 0.3 |
| Law | 2.6 | 2.3 | 2.1 | 2.0 |
| Agriculture | 1.3 | 1.3 | 2.9 | 2.3 |
| Others | 0.7 | 3.0 | 0.6 | 0.4 |
| | 100.0 | 100.0 | 100.0 | 100.0 |

TABLE VII

University Student Enrolment : Stage-wise
(1960-61 and 1967-68)

| Stage | 1960-61 | | 1967-68 | | 1967-68 Index 1960-61 =100 |
|--------------------------|----------------|-----------------|----------------|-----------------|-------------------------------------|
| | Enrol- ment | Percen- tage | Enrol- ment | Percen- tage | |
| Pre-University | 1,81,631 | 17.6 | 4,85,271 | 21.9 | 267 |
| Intermediate | 3,00,793 | 29.2 | 3,43,807 | 15.5 | 114 |
| Graduate | 4,64,848 | 45.1 | 12,11,083 | 54.5 | 262 |
| Post-Graduate | 58,908 | 5.7 | 1,17,250 | 5.3 | 198 |
| Research | 5,165 | 0.5 | 11,479 | 0.5 | 222 |
| Diploma/Cer- tificate | 10,704 | 1.0 | 30,449 | 1.4 | 285 |
| Pre-Professi- onal | 8,335 | 0.9 | 19,633 | 0.9 | 235 |
| Total | 10,30,384 | 100.0 | 22,18,972 | 100.0 | 215 |

TABLE VIII

Distribution of Colleges : 1961-62 and 1966-67

A. Courses of Study

| | 1961-62 | 1966-67 | 1967 Index with 1961-62=100 |
|-------------------------------|---------|---------|-----------------------------------|
| Arts, Science and Commerce | 1,201 | 1,915 | 159 |
| Engg & Tech. | 83 | 105 | 126 |
| Medicine | 83 | 137 | 165 |
| Law | 46 | 69 | 150 |
| Agriculture | 43 | 54 | 125 |
| Vet. Science | 18 | 20 | 111 |
| Education | 133 | 200 | 150 |
| Oriental Learning | 156 | 177 | 113 |
| Others | 20 | 72 | 360 |
| Total | 1,783 | 2,749 | |

B. Types of Management

| | | | |
|---------------------|-------|-------|-----|
| University Colleges | 107 | 166 | 155 |
| Private Colleges | 1,223 | 1,968 | 161 |
| Govt. Colleges | 453 | 615 | 136 |
| Total | 1,783 | 2,749 | |

TABLE IX

Strength and Distribution of Teaching Staff
(1962-63 and 1967-68)

A. University Departments Colleges

| Cadre | 1962-63 | 1967-68 | 1967-68 Index 1962-63 = 100 |
|-----------------------------|-------------------|-------------------|--------------------------------|
| Professors | 836 (7.6) | 1,606 (9.2) | 193 |
| Readers | 1761 (15.9) | 2,575 (14.8) | 146 |
| Lecturers | 7,209 (65.2) | 12,210 (69.3) | 170 |
| Tutors and Demonstrators | 1,238 (11.3) | 1,165 (6.7) | 94 |
| Total | 11,044 (100.0) | 17,456 (100.0) | 158 |

B. Affiliated Colleges

| Cadre | 1962-63 | 1967-68 | 1967-68 Index 1962-63 = 100 |
|----------------------|-------------------|-------------------|--------------------------------|
| Senior Teachers* | 7,651 (13.8) | 11,655 (13.7) | 152 |
| Lecturers | 39,256 (71.0) | 61,861 (72.8) | 157 |
| Tutors/Demonstrators | 8,419 (15.2) | 11,482 (13.5) | 136 |
| Total | 55,326 (100.0) | 84,998 (100.0) | 154 |

Note : Figures within brackets indicate percentage of the cadre to the total staff in that year.

* Including Principals

TABLE X
Degrees Awarded in Science and Technology
(1950 and 1966)

| Degree | Number of Degrees Awarded | | 1966 Index 1950 = 100 | Average (Compound) Rate of Growth per year |
|--|---------------------------|--------|--------------------------|--|
| | 1950 | 1966 | | |
| B Sc | 9,628 | 42,437 | 451 | 10.4% |
| M Sc (excluding Mathematics) M A./M Sc. (Mathematics) | 1,102 | 8,009 | 727 | 8.4% |
| Bachelors' degrees in Technology (Engineering and other subjects) | 1,660 | 12,710 | 765 | 11.8% |
| Bachelors' degrees in Agriculture and Veterinary Science | 1,100 | 5,757 | 523 | 5.9% |
| Doctorate degrees in Science and Technology | 100 | 817 | 817 | 15.0% |
| Total | 13,590 | 69,730 | 513 | |

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APPENDIX III

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